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ORIGINAL DEPARTMENT.

LECTURE.

ENDOCARDITIS, OR VALVULAR DISEASES.

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(*Continued from page* 34).

We will continue the subject of diseases of the valves of the heart. I had explained to you that endocarditis is perhaps the most prolific cause of derangement of the valves, and that it may occur as the result of acute disease, commonly associated with rheumatism, occasionally found in connection with Bright's disease, sometimes occurring in the course of measles, and rather frequently in the dropsical sequelæ of scarlet fever; then, too, sometimes occurring in septicæmia. And still again, I told you it may occur independently of any of these causes—a spontaneous, I might say almost idiopathic disease. That it does occur frequently in this manner is rendered evident by the large number of persons that suffer from disease of the valves who have not had any serious sickness preceding the development of heart disease; who have not had rheumatism; who do not remember that they have had scarlet fever; who have not had Bright's disease, etc. Then I told you of atheroma, a particular deposit, more frequently found on the inner, or rather under the inner, lining of the arteries, encroaching upon the elastic tissues of the walls. I told you that it undergoes, whether in the valves here or in the artery, one of two changes, as a rule. It may soften and form a yellow collection, looking like an abscess, and this may rupture the intima, and escape into the blood, and do mischief or not, according to the fineness of its division. The other change is to a calcareous matter, a calcareous degeneration of the arteries or valves of the heart, having been preceded by atheroma. It does not seem possible that the elements of an atheroma can be converted into a bony matter. It would seem altogether likely, therefore, that it is substituted for these after they are softened and have been absorbed. I told you that this deposit in the valves causes a thickening of them, an inflammation of them, a bony deposit especially being a constant irritation. I told you that the valves are sometimes ruptured; and I pointed out to you a specimen in which the inferior or lower portion had given way, so as to render that part of the valve useless in retaining the blood in the artery. I told you of a case—I don't know, though, whether I did—a case in which a man, lifting a heavy beam—he was a foreman in a cotton mill and some heavy beam connected with the machinery had fallen, or one end of it had fallen, and he with some other men attempted to raise it to its place—and while doing this he felt a sudden something, he could hardly tell what; but he said there was something that gave way, and he fainted and sat for a considerable time in the mill before he attempted to go home, and then went home with assistance; in a few days he revived again and went to his work. He lived twelve years after that, and had a very large hypertrophy. At post-mortem the longest portion of the tricuspid valve was seen to have been flapping backward and forward in the current of blood. As the blood ran down the strand was in the ventricle, and when the heart contracted it would

double back on the rest of the valve. A tendinous cord had given way, and he felt a sensation of something giving way. There was a murmur heard in systole, not in diastole.

The valve may give way in a considerable variety of cases. A gardener had loaded his cart too heavily; his horse could not draw it, and he put his shoulder to the rear of it, to help the horse, and exerting about all his strength he also felt something give way, and was very much crippled after that. He came to Bellevue Hospital; there I had an opportunity of examining him before and after death. A portion of one of the folds of the aortic valve had given way in his case, and I thought almost without previous disease of it. Atheroma is a very common precedent of the breaking of valves. This man lived about two years after the accident occurred to him; the other seven.

I was with a gentleman who was making great haste to reach the top of a hill. He was within about fifty feet of it, and he started on a run up the steep acclivity. The result was, he was brought into the same condition as the gardener, and from that time on, as long as I knew him, there was a regurgitant murmur at the aortic opening. He broke something at that time. Precisely what, whether the bottom of the valve gave way, or whether it split down, I cannot tell. One thing, however, with regard to the splitting of a valve, that is worthy of notice. You remember there is on the top of the valve a kind of cord, and immediately below that cord the valve is not as strong as at the edge. The common way for a valve to break is to give way at that cord, and it vibrates in the current of blood, and frequently makes a musical sound, a sort of Æolian harp sound; making a noise that is not altogether unlike that of a cord stretched across a little opening in a window. It is quite a musical note; and I don't know that there are any other circumstances in which that musical sound is produced. Then I should add, in this enumeration, that the tendinous cords are occasionally found welded together, two, or three, or more of them, and, of course, a great deal crippled in their action. In certain instances the two folds of the mitral valve and the three portions of the aortic valve grow together, in the latter case leaving a slit by which the blood can go out and by which it will return in regurgitation. How in the world that can occur I do not know, but it does occur. They are almost always thickened, so that they do not play freely before this adhesion or coalescence takes place. But moved, as they are, continuously, by the current and reflux of blood, it is very difficult to understand how these three portions of the aortic valve can grow together, leaving only a little slit for the blood to pass through. It is easier to understand how adhesion may take place between the two curtains of the mitral valve, for by contraction they can be drawn together, and contraction is effected by the material that is deposited between the two folds of the valve.

I will put in your hands, now, for example, a few specimens of valvular disease. Here is one, for example, in which, as you open it in this way, the wall is the seat of spots of atheroma, and some of these have passed into a calcareous condition, just here, near the valve. Even the valve itself is shortened and thickened, but not remarkably. Now, here is the aortic valve, that is very much diseased. If you put your finger on it you will find that it has hard scales on it. It is not very much contracted, except one fold of it. One fold is thickened and hardened, and on the inside of it is a little calcareous matter. This has been a pericarditis, and the outside of it is roughened by the adhesions that formerly existed on the pericardium. The mitral valve is in a state of very marked stenosis, that is, contracted, and you see here almost nothing of the tendinous cords—they are shortened so much. The fleshy columns are a little elongated, to make compensation for that shortening of the tendinous cords. This is a pretty striking specimen of stenosis of the mitral valve, and in this connection it may be that we shall find an illustration of the rule that applies to such cases generally, that is, stenosis of the mitral valve induces hypertrophy of the right ventricle; stenosis of the left auriculo-ventricular valve induces hypertrophy of the right ventricle, and frequently of the right auricle, and also sometimes of the left auricle. This you see illustrated here. It is thicker than natural, the right ventricle, but not very much hypertrophied. This stenosis, marked as it is, did not disturb the circulation as the same lesion does sometimes. Then in this specimen you have two lesions, the aortic valves thickened and a little calcareous deposit in them; at the mitral valves, stenosis.

In this specimen the mitral valve is thickened and hard, but not disorganized, and it is large enough to allow the circulation to go on with ordinary freedom. The aortic valves are thickened, shortened, and hardened.

In this specimen the aortic valves are a little but not much diseased. The chief lesion is probably in the mitral. You observe the mitral valve is thickened, not exactly disorganized. There is some hypertrophy of the heart. This is not a very striking specimen.

Here is a very good one, and opened in such a way that you can see the change that has taken place: it is in the aortic valve. You observe they are contracted in their length, contracted in height, and thickened, but not nearly as much as in some specimens I shall show you hereafter.

Now comes the question, what sort of disturbance will these lesions of the valves produce. Of course, it will be first felt in the circulation. Let us take a mitral stenosis, such as you have in two or three of the specimens now going round, and its effects are perhaps as simple as the effects of any of these lesions. Indeed, they all follow pretty nearly in the same track after they have taken the first step. Remember, now, that the blood in the left auricle has just come from the lungs, and it is seeking its way into the left ventricle. It is obstructed at the valves; well, what will that do? The circulation by the right heart we are to assume is natural. The blood goes into the general system, and empties into the right side of the heart, and from that is thrown into the lungs, and it begins to come from the lungs into the left heart and is obstructed; what then? The first thing will be a certain amount of engorgement of the lungs. They receive blood faster than they can discharge it; the consequence is, therefore, an engorgement of the lungs, greater or less, depending upon the extent of the stenosis. Next after that comes a strain upon the right heart, which is attempting to send blood all the time into the lungs, and associated with this may be what is called an emphasized condition of the second sound in the pulmonary artery. That is pretty full of blood, the right heart pumps more into it, the reaction is stronger, and makes the valves strike with more force than natural. Hence, an increase in the second sound in the pulmonary artery, in an instance where the disease is at all considerable. Well, what more? Stop the blood from coming into the right heart and what will be flooded? Why, every important organ of the body. The blood cannot return from the veins with anything like its natural freedom. The liver will be engorged, the spleen will be engorged, the brain will contain more blood than it should, the face perhaps will be a little puffy, from a little effusion into the tissues from the veins. The veins cannot empty themselves freely. Little clusters of enlarged veins are found upon the surface of the body, chiefly upon the chest. The external thoracic veins frequently become enlarged. There is general hindrance of the blood in the general circulation, because there is obstruction of the blood in the lungs, and consequently obstruction in the right heart, to which the blood in the general system should naturally go. One consequence of this accident, then, is enlargement of the liver; not in all cases, not in the majority of cases, but now and then. And sometimes quite considerable hypertrophy of the heart, and enlargement of the spleen, from the same cause, namely, obstructed return of blood. The effect upon the stomach is often noticeable. There being more blood in the stomach mucous membrane, the digestive membrane, than can be used, the digestion becomes impaired. It is imperfect, and the appetite feels the effect of that. Then, too, the effect of the obstruction is sometimes so considerable as to hinder the contribution of the thoracic duct to the general nutrition of the body. The thoracic duct, you remember, receives the material that is digested in the intestine, and carries it to a vein, through a duct, and that vein delivers it to the general circulation. Well, that is obstructed also; it cannot freely give its nutritious fluid to the blood, and it not infrequently happens that the patient becomes pale, in consequence of imperfect nourishment, though he may eat a considerable quantity of food; and you will observe, frequently—I am referring now to an advanced case—that the patient speaks of his feet being swelled, particularly at night, if he is on his feet during the day, and you observe yourself some puffiness about the face. You will particularly be able to notice what has been called the tear line; that is, a something looking like a silver thread or a thread of transparent glass lying upon the upper edge of the lower eyelid. It is a little œdema of the conjunctival covering, and as the eyelid presses considerably upon the eye it is forced up along the ridge, above the tear line. There may not only be œdema of different parts of the body, but the whole body may be swollen. The kidneys have suffered congestion, and have taken on a condition analogous to that of Bright's disease, generally the large white kidney, and they are unable to perform their function properly. The urea remains in the blood, or a part of it, at any rate, and produces its general effects. The urine is commonly scanty, sometimes even bloody, and then again there is not unfrequently an effusion found in the chest, a double pleuritic effusion. Day before yesterday I examined a gentleman from the country, or rather from a distant city, who had been ill for some months, and in the course of the examination found fluid effusion coming nearly up to the lower angle of the scapula on both sides. My thought was, he has Bright's disease. He had heart disease, for his

heart was enlarged, but there was no valvular murmur at the time I examined him. On examining the water I found it contained a large quantity of albumen. It was one of the cases that interested the late Dr. Stephens so much when this matter was first investigated. There was a good deal of the amorphous urates in the urine, and they settled slowly. Putting the urine charged with the amorphous urates into a test tube it was almost opaque; on heating it, it became perfectly transparent, but heating it more, up to about the point of boiling, it became cloudy with albumen, and heating it till it boiled, it became almost thick. I have a scale for estimating the amount of albumen in the urine, ranging from one to ten. Ten represents a coagulation of albumen in the tube, so that nothing will run out; invert the tube and nothing is discharged; the whole of the urine is imprisoned in the coagulated albumen. When there is but a trace of albumen it is represented by one. In the specimen of the patient spoken of the amount of albumen was represented by six; or more than half of the urine was composed of albumen. I did not know that this gentleman had Bright's disease when I found a double pleuritic effusion (although I felt pretty sure of it), for double pleuritic effusion does once in a while occur without Bright's disease.

This, then, is substantially the series of consequences that will result from obstruction, from stenosis of the mitral valve. And you can see that when the blood is returned through this valve, that is, when it has entered the ventricle and a part of it is returned into the auricle, that is going to do exactly the same thing when the condition becomes marked. It is all the same, save that that was stenosis, this is insufficiency. The valve is incapable of serving as a gate, a watch, and a part of the blood that enters the ventricle goes back into the left auricle, and obstructs the blood that would come in from the lung, so that the result in the end is exactly the same, congestion of these various parts, sometimes cyanosis. This latter belongs also to mitral stenosis.

Then there is another point which I may as well refer to here. You sometimes see a pulsation in the veins of the neck, the jugular. There are two modes in which what appears a little like a pulsation is to be accounted for. When this obstructed circulation occurs the vein is seen to fill in expiration. In expiration the blood does not flow so freely in the lungs or into the chest, as in inspiration, and in expiration you may watch the vein and see it fill, but it fills from above. It is not a wave coming up from below. About the only conditions in which the wave will come up from below are, when there are insufficiency of the tricuspid valve, that is, the valve of the right side of the heart, or when there is hypertrophy of the right auricle, or when there is a pulsation tumor, like an aneurism resting upon the vena cava descendens. In either of these cases a regular wave may come up the vein, but I know of no other condition in which it does occur; but in the cases referred to you observe the filling of the vein is a different thing from a wave coming from the heart, or a pulsation from an aneurismal tumor. It is not necessary to dwell longer upon the regurgitation at the mitral valve, as the effects of it in the end are the same as those of stenosis.

Now turn to the aortic valve, to the two conditions that have been named, obstructive disease and regurgitative, or direct and indirect, if you choose to so call it. When there is obstruction at the aortic valve the sound produced by it will be heard in the contraction of the heart in systole, and it will be loudest at the base of the heart, near the sternum. That may exist in moderate degree for a very long time, and no very grave consequences result. But if it is a growing disease, if it is a form of valvular disease that is irritating in itself, like a spicula of calcareous matter in the valve, action of the valve will excite an inflammation and cause a deposit of material that can contract and still further deform the valve. But there are a great many persons who can carry both mitral regurgitation and aortic obstruction a very long term of years. Indeed, my colleague, the late Dr. Gilman, came to me with mitral disease, at a certain time, and he said, "am I going to die of it?" "Well, maybe." "Well, when?" "O, I think you will live twenty years." The years rolled on, and I heard nothing more of it until, at length, Dr. G. came to my house, and exclaimed, "There, doctor my lease is out! I want to renew it!" He lived about four years after that.

I remember a patient who carried a valvular lesion fifty years before a fatal sickness occurred; a young man, at first, all activity, but, of course, he could not go up-hill or up-stairs as well as other people, but his mind was active, and as an evidence of his industry, in the old time, when speculation did not fill a man's pocket in a day, he had made by whale oil a million of dollars, and built up the fortunes of two brothers in this period of fifty years.

I am in the habit of referring to a certain case because it is rather impressive. Many

years ago I had occasion to listen over a certain gentleman's heart, and I found a mitral murmur. He appeared perfectly well, and I went on, made no sign of surprise, and I thought the thing over. He is of phlegmatic temperament, and I do not think he will be very much excited; he will take the world pretty easy; I think he will take the world quite as easy without as with a knowledge of the disease of his heart. Now that gentleman is in active practice to-day; you see his name not infrequently in the medical journals, as having performed this or that operation, and he is a great deal happier than he would be if he knew he had mitral regurgitation. There is no knowing, then, when the unfavorable issue will take place; but I can tell you this about it: when a patient comes to you complaining of a great deal of shortness of breath, when he has œdema of the feet, and possibly some swelling of the face, look to the kidneys. They probably have become involved by that time, and in a few weeks, in a week or two, he may be pretty gravely sick, having carried disease of the heart for twenty, thirty, forty, or possibly fifty years, as in the case I have just referred to. And here it is perhaps proper to say that the last generation of doctors and the present generation of people who are not doctors look upon the statement that they have heart disease as equivalent to signing their death warrant. The profession have outgrown the idea that heart disease must be fatal in a few months; but the older physicians, physicians of past generations, not having auscultation to guide them, were not able to detect diseases of the heart until they came to involve disease of the kidneys, and perhaps of the liver, and possibly of the spleen. In other words, not until œdema came. Their post-mortem examinations told them what that meant. They were able to recognize then, by the general signs, what was the trouble, but the patients generally died pretty soon, in a few months after the œdema occurred. But they may have passed forty, fifty, or even sixty years before that, with the same disease of the heart, only it now comes to be obstructive to the venous circulation.

But to go on with the obstruction at the aortic opening. If it is moderate there is compensation. The heart has the faculty of growing in size and in strength to meet an emergency. and we speak of compensating hypertrophy of the heart. If the blood does not flow easily through the aortic opening the heart will gain additional strength by gaining additional fibres, and will overcome the obstacle, so that a man may carry a disease of that kind a great while without knowing that he has it. But when regurgitation occurs, and that is only in the advanced stages of obstructive disease, when the valves become shortened and thickened, so that they cannot fall together, a certain quantity of blood that has been sent into the aorta goes back again into the ventricle every time the heart dilates, and here is work to be done over and over again. The heart has to do its work twice over, substantially, at any rate, once and a half. The ventricle has just been filled from blood forced in from the auricle, and half filled from that that comes from the aorta. The effect of that is exactly that which I have been describing to you, and you will see how it must be so. When blood from the aorta falls back into the left ventricle it prevents blood from coming in from the left auricle. Only about half the contents of the ventricles can come in from the left auricle, and consequently the blood will set back upon the right heart, and engorge the lungs, and it will also produce very much the same general symptoms that I have described to you. Well, then, these all come to about the same thing. Regurgitation by the aortic valve, regurgitation by the mitral valve, are only one step apart, and their consequences are substantially the same. So also contraction of the mitral wave. A contraction of the aortic valve, you observe, is compensated for very generally, and that is not so grave a trouble. A stronger current of blood is sent over it, and, of course, into the general circulation more blood is sent in a given time, and consequently the general circulation does not feel it so much. These are the general effects relating to the advanced stage of cardiac disease.

The question has been often raised and discussed, which comes first, the kidney disease or the cardiac disease. My own answer is very positive; that while the cardiac disease may come after the kidney affection has begun, in the great majority of instances in which they are connected, the connection is as I have been describing to you. The kidneys become congested because the circulation is obstructed at the heart, and after they have suffered a certain length of time they will begin to give albuminous urine; they do not secrete the urea in full measure, and œdema then begins in different parts of the body. It is my strong conviction that in nine cases out of ten where the two are associated the cardiac disease preceded, and the others will be instances in which kidney disease from some other cause has occurred, and the cardiac disease has followed it, possibly by the influence of congestion in a certain degree. But the order is almost always

cardiac disease first. and renal disease afterward. I have noticed so often what I have already explained to you that I cannot have a doubt about it. I examine a man and find he has valvular lesion of one sort or another; I watch him for a year; he gets along very well; and perhaps ten, fifteen, or twenty years after I had examined him for the first time he begins to suffer; he begins to get œdema of the lung, which is one of the effects I have not mentioned—œdematous condition of the lungs, as well as of the legs, body, and face.

With reference to the right side of the heart: we have but little experience with disease of the valves on this side. For forty-nine cases of valvular disease of the left heart there will hardly be one of valvular disease of the right heart. I have told you that after birth the left side of the heart is the seat of disease, and before birth the right. In the right heart there are lesions of the valves, though rarely met with. In a little boy about eight years old, when the college was in Crosby street, I found a very peculiar sound in listening over the base of the heart. It was not a murmur, but it was a snap, and it was in both actions of the heart. It was a double snap, very much such as you get by pulling a piece of ribbon suddenly. He died, and at the post-mortem examination, that sealing together of the pulmonary valves was found which I have already described to you. The edges of the three portions of the valve were sealed together, with the exception of an opening, which must have been less than half an inch in the middle, and one of the lips of that opening was a little longer than the other, and it was that that snapped when the blood came against it from the heart, and snapped again when the presure from the artery was felt. That was the only lesion about it. I did not distinguish that from aortic disease, for it is a difficult thing to do it, but some persons claim to be able to do so by getting the sounds of the pulmonary valves a little to the left of the sounds that come from the aorta. I dare not trust my ear for the diagnosis; and besides, there is another mode that is worth something, and not worth a great deal either, and that is, if the sound is at the base of the heart, to follow it to the artery, and particularly to the left and right clavicle. Listen to the sound from the heart there; if it comes up there pretty fully, it is in all probability in the aorta. I say, in all probability. I make that modification because the two vessels, the pulmonary artery and the aorta, are sealed together by loose connective tissue, and for a certain distance after they leave the heart they run together.

COMMUNICATIONS.

CHRONIC NASAL CATARRH.

BY JOHN W. GUSTINE, M.D.,
Of Carroll, Iowa.

Read before the Central District Medical Association, of Iowa, December 21st, 1880.

My principal object in writing this paper is to excite an interest, if possible, in a disease which is certainly as prevalent in the west, if not more common, than any other morbid affection to which our population is subject. Iowa especially may be termed an ozæna State. It may be said to be almost indigenous to her population, the proportion being about one in three.

Authors have assigned various causes of this disease, and what few have written upon its nature and cause differ, and leave us in as much doubt as to what really produces it as we were before we read their views.

Dr. Allen,* Prof. of Physiology in the University of Pennsylvania, gives a very unique and ingenious cause for this affection; he says, "The nasal chamber being a modified portion of the respiratory tract, it follows that its functional integrity is dependent upon the freedom with which a current of air can pass through it. Obstruction is fatal to its efficiency, for not only is the sense of smelling lost, but the unconscious effort to breathe through the nose ordinarily causes congestion and distress, and at all times the normal outflow and distribution of mucus is interfered with. Nasal mucus has a tendency to flow backward. The gentle inclination of the floor of the nose from before backward and the dip of the turbinated bones determine this. Nasal obstruction interrupts this flow, and occasions accumulation and subsequent inspissation of mucus, or a reversal of the current, which results in escape of the secretion at the nostrils." He also claims that in most instances this obstruction is produced by the bones of the nose impinging on the soft parts, not by slight, but with firm pressure. He further says that there are "a variously defined group of cases encountered, in which the nasal chambers are everywhere capacious and yield nowhere any abnormal contact. These are probably instances, when not local expressions of constitutional conditions, due to rhinitis fluxes, the result of structural changes in the membrane itself, or the sequence of imperfectly guarded chambers, which permit the too free ingress of irritating

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currents of air, and thus the membranes are continually exposed to the contact of extraneous substances, and to abrupt changes in temperature." Prof. Allen does not exclude other causes as operating to produce this disease, but contends that this is one of the principal causes.

Prof. Samuel D. Gross, in his *System of Surgery*, gives it as his opinion that ozæna is produced, in most if not all instances, by a scrofulous diathesis or a contamination of the system with syphilitic virus. Admitting this to be the fact, that these two causes are the main factors in producing this disease, we would be loth to concede that one third of our population have either inherited morbific elements destructive to the vigorous health of our citizens, or acquired demoralizing vices, which would leave them but human wrecks; that we are either syphilitic debauchers or strumous descendants. Niemeyer, in my opinion, comes nearer to the true etiology of this disease than most of those who have written on it. He believes it to commence with cold in the head, local irritants, such as the entrance of hot air, dust, acrid gases, or foreign bodies, the snuffing of tobacco by persons unaccustomed to its use, blows, shocks, etc. He also alludes to the strumous and syphilitic taint. These latter, no doubt, have a tendency to disseminate the malady and increase its inveteracy. But these causes are insufficient to explain why this disease is so prevalent in the West; why so many persons of apparently good, sound constitutions, should be afflicted with it for years, and some even for a lifetime.

If we examine the anatomical parts involved, we find an extensive surface lined with one of the most sensitive and vascular membranes in the human body. The Schneiderian membrane is one of extreme vascularity; it is also furnished with a large number of nerves and nerve filaments, the blood vessels having a very superficial course, rendering it very sensitive to changes in the temperature and to the deleterious effects of foreign bodies. Underlying it, in some parts, are the most delicate and thin plates of bone, and filled with cells, which are met with in the osseous system. This membrane is also composed of mucous glands, which pour forth a white, transparent, inodorous and insipid fluid; liable to undergo various changes, such as irritation, congestion, inflammation, ulceration, gangrene, polypi, schirrus, cancer, atrophy and hypertrophy. Guarding the entrance to the organs of respiration, exposed to the first impressions of all noxious as well as innoxious emanations, it is strange that it should be equally if not more predisposed to morbific action than other parts of the human system. If noxious effluvia are impressed upon it, congestion follows, even though evanescent in its effects; cold also produces the same condition; after the irritant passes off, it returns to the normal state, and hence these continual wavelets of repose and reaction in its vascularity must, of a consequence, eventually produce disease.

Microscopical investigation has done scarcely anything towards elucidating the cause of this affection, neither has pathological anatomy contributed anything towards arriving at a correct conclusion; for the opportunity seldom presents itself to take observations on the cadaver, therefore we are compelled to reason, to a great extent, from analogy, to assist us in determining what may be the etiology of this disease, even though our conclusions may be based somewhat on hypothesis.

Wherever the temperature falls below the freezing point, we find chronic nasal catarrh co-extensive with this condition of the atmosphere. Its prevalence and frequency depends much upon this thermal line. In warm latitudes you scarcely ever find a case of this disease, unless imported. Removal to a warm climate is more certain to benefit this class of patients than all the remedies yet discovered. The more variable and cold the climate, the more frequent are its subjects. Might not the sudden extremes of heat and cold incident to our climate, acting on a sensitive membrane like the mucous tissue of the nose, driving the blood from the external surface to the internal, and then in a short time followed by reaction, keeping up diminutive waves of excitement and depression. be one of the great sources of this disease? We find our population afflicted six or eight months in the year with all forms of cold in the head, from a highly congested condition of the Schneiderian membrane down to various shades of vascular excitement. Continuous attacks of this kind for months and years must cause disease of this organ in the end. There is no truth better established in pathology than this fact, that frequent acute or lengthy attacks of morbid action in any tissue is followed by a chronic state, unless its violence destroys the part. If this position be true, are we not warranted in supposing ozæna, in this climate, due to this cause? Why may there not be some unseen and peculiar condition of the atmosphere in localities producing this affection, as well as those causing malaria and goitre in the mountainous districts of Europe. An objection may be raised to this line of argument, that in many

individuals laboring under this disease only one of the nasal passages is involved. Why not both in all subjects? If Prof. Allen's investigations are correct, that "out of fifty-eight skulls preserved in the Wistar and Homer Museum only eighteen exhibited normal nasal chambers; in the remaining thirty-seven, nineteen were narrowed on the left side and twenty-one on the right;" this goes far to explain why one nostril is more frequently affected than both.

According to Rokitansky, this disease gives rise "to polypous outgrowths, which appear first as a diffuse thickening over a large surface of the mucous membrane, particularly on the turbinated bones, growing with an uneven surface, and developing wart-like protuberances and fold-like ridges. Sometimes the growths are more circumscribed, assuming a rounded, pedunculated, pyriform shape. They consist of a gelatinous growth from the matrix of connective tissue of the mucous membrane and from its glands, which frequently degenerates into cysts. Gradually the material of which the growths are constituted is converted into firm fibrous tissue. They contract or block up the air-passages, and finally may become visible in the openings of the nostrils."

There is another fact, so patent to the pathologis that it would be an oversight not to refer to it. It is this: that we have diseases analogous to chronic nasal catarrh, involving the mucous membrane lining other organs, which to a great extent present similar symptoms, course and ter mination, resisting, in numerous cases, any rational plan of treatment. Follicular inflammation of the throat, chronic bronchitis, catarrh of the stomach, chronic inflammation of the mucous membrane of the bowels, catarrh of the bladder, leucorrhœa, chronic endo-metritis, chronic endo-cervicitis, are some of those morbid affections which present a number of features similar to the disease under discussion. In the affections invading the mucous membrane of these organs above mentioned, which are of a chronic character, we have the turgescence, increased flow of mucus, or muco-purulent secretion. We have in some of them the same intractibility, the same futility of treatment; the diseases resisting often our best directed efforts, running on for years without any amelioration; teachers advising the most opposite plans of treatment; the remedial measures differing as much as their effects are various.

The inference to be drawn from these facts is, that less is known about the successful treatment of the chronic complaints of mucous membrane than any other diseased tissue of the body. This inference is certainly true with respect to chronic nasal catarrh.

The causes enumerated by those who have written on this subject are insufficient to explain why so many persons are affected in this latitude; we are therefore compelled to seek some other predisposing cause, and that cause we believe to be a peculiarity of our western climate. True it is that some persons are more susceptible to its influence than others, especially those who are subject to irritable and granular throats, chronic enlargement of the tonsils, those who snore in their sleep, and are of a lymphatic temperament. Individuals who are susceptible, as many are in this cold, variable climate, to frequent attacks of coryza or acute colds in the head, are most afflicted with ozæna.

This disease may involve a large portion of the lining membrane of the nose, or it may be confined to a locality. It may affect the turbinated bones, the middle and inferior meati, the floor of the nostrils, the soft palate and the pharynx, the superior maxillary and frontal sinuses, and even extend to the ethmoidal cells.

Mere chronic congestion may alone be present for a long time, with increased flow of mucus or muco-purulent matter. If the diseased action continues and the morbid secretion becomes obstructed, large flakes of inspissated matter are thrown off, some of them having the form of the turbinated bone; and in some instances I have seen the discharge like the yolk of an egg. If the secretion is retained for any length of time, decomposition occurs, with fetor, and frequently sanies and ichor, as a result, especially if there is ulceration. The formation, inspissation and obstruction of this secretion, causing it to be expelled with force from the nostril, injuring the vascular texture of the mucous membrane, is one of the principal causes of its inveteracy. The secretion often becomes so copious that it passes down the throat into the stomach while the patient is asleep, causing nausea and vomiting. In dependent positions of the head it sometimes runs from the cavities for a few moments, in a continuous stream. The fetor is often so great as to be observed within a few feet of the person affected, rendering the apartment where the individual is unbearable to others. In persons of a strumous or a syphilitic taint its ravages may extend to the bones, causing caries and necrosis, with discharge of osseous matter, involving parts adjacent to the brain, as once occurred under my own observation, the bones of the palate, nose, and even of the face, dropping out one by one, while the destruction of the soft parts goes on,

until the most hideous, horrible and irremedial deformity ensues; the pain, discharges, and fetor harassing the victim by day and night; rendering him an object of disgust and pity to his friends; life a burthen to himself; loathing his existence, he is almost induced to follow the advice of Job's wife, "curse God and die." It is unnecessary to dwell upon the symptons of this disease, as you are all too well acquainted with them, and they are too obvious to require any extended description. It might be well enough to add, that this rapid and terrible destruction of the parts involved can seldom occur except where there is some systemic taint. Chronic catarrh in a vigorous and healthy constitution, in this latitude, may run on for years and present no other appearance of morbific action than increased secretion, erosions or ulcerations of the mucous membrane. There is one other point, corroborative of the position maintained in this paper, which I desire to refer to, and that is, the prevalence of this disease among the African race, who have emigrated from the southern States to the northern. They may be entirely free from its effects in the south, and yet a residence of a few years in this climate seldom ever fails in producing it among them. In fact, some of the most inveterate cases are seen among this people.

The treatment of chronic nasal catarrh is various as the remedies employed for its alleviation. I wish I could recommend a course of treatment that would insure a cure, something that would act as a specific in restoring the parts to health. It has been said, and well said, "that to cure a disease you must discover the cause, and when it is removed two-thirds of the treatment is accomplished." There is a good deal of truth in this adage, but numbers of cases are treated daily, where the cause is unknown and the remedies contraindicated, who get well through the agency of the *vis medicatrix naturæ*, and in spite of the senselessness of the treatment. The treatment of ozæna, in many instances, demonstrated this last idea very forcibly.

Rhinoscopy, in the last few years, has done much toward elucidating the morbid action in localities hitherto unexplored, and has been a great aid in the proper administration of medicines to the parts affected. It has shown when congestion, erosions, ulcerations and necrosis exist; when hypertrophy and atrophy invaded the tissues; and that condition of the membrane, to which Rokitansky refers, giving rise to polypous outgrowths. But there are parts, even with this adjuvant, it is impossible to explore; hence, in numerous instances, we are unable to arrive at a correct diagnosis of the morbid anatomy of the tissues involved, and must, of necessity, be guided by the symptoms presented.

My experience in the treatment of this disease has been a complete failure, in most instances, so far as producing a cure. Improvement has followed the use of the various remedies, both local and constitutional, recommended by the most reliable authorities on this subject; but I must confess that my success in this latitude has fallen far short of that which they have represented, especially in old and inveterate cases. I deem local remedies of paramount importance. For local applications, one of the best to commence with is a weak solution of permanganate of potash, one grain to the ounce of water. And let me here say, that I prepare the water myself, taking rain water and boiling it, to destroy as much as possible the infusoria always present in this fluid, and then strain. Much of the distilled and medicated waters in the shops is impregnated with this adulteration by long standing, and hence is unfit to be used in this affection. The zinc salts, the sulphate and the chloride, are especially indicated when the discharges are of a thin, dirty yellowish color. In mild cases without erosions or ulcerations, the strength of the various local applications must be increased as the patient can bear them. Do not produce too much pain. Carbolic acid is one of our best remedies to allay fetor, and aids often in restoring the parts to a more healthy action. One important point to remember is, that the membrane must first be cleansed of secretions more particularly from inspissated mucus, so that the medicinal substances may come directly in contact with the diseased surface. One of the best remedies for this purpose is a solution of common salt, half an ounce or one ounce to the quart of water; also a solution of muriate of ammonia is an excellent dissolvent. They can be administered by means of Thudichum's apparatus, or by a large syringe. When there is a thin, gleety discharge, you will find a weak solution of sulphate of copper, one-fourth to half a grain to the ounce of water, a most excellent remedy. It will not do to continue one substance too long at a time. It is best to alternate them every two or three days, unless the improvement appears to be very decided under their use. Change of remedies is beneficial in this disease as well as in most others. We often fail from inattention to this rule. When ulcers or erosions can be seen, I have no doubt, though I have never tried it, the plan of Prof. Allen, making the application by means of an instrument similar to a hypodermic syringe, to the spot,

would be far better than any other method; and for this purpose nitrate of silver is one of the best preparations.

When the maxillary sinus is involved, it will be necessary to extract one of the molar teeth and make an opening into the antrum, through which the injections can be administered. Sometimes the disease extends to the frontal sinus, and these are the most obstinate cases we have to deal with, because it is impossible to make our applications *vias naturales*. The idea has occurred to me, though I have never tried it, that it would be well to dissect the soft parts, by means of a flap, from the frontal sinus, and make a small orifice with a trephine, and administer our local remedies through this opening. I merely suggest it for your consideration. Hypertrophy and atrophy of the nasal membrane are very unfavorable conditions, and, as a general rule, resist treatment a long time; and many cases of this character are never cured. These are the conditions which require strong caustic and ointments. Ointments are more effective here than solutions, because their effects are more permanent. It is often necessary to apply them in full strength, so as to change the diseased action of the part. Boracic acid has been highly recommended in the latter, and the iodine preparations in the former. A weak solution of corrosive sublimate, as an alterative, in hypertrophy, has been used with benefit.

Administration of remedies by the atomizer was at one time used extensively, but experience has not confirmed its utility.

Insufflation through the posterior nares of various powders, is now more fashionable than any other treatment. Of its merits I know scarcely anything. This treatment, however, is worthy of an extensive trial, for it has been recommended to me by a few of our best physicians in the State.

Of course, constitutional remedies are not to be neglected when there is a systemic taint of any kind, and these indications are too obvious to you for me to occupy your time with the treatment.

There is one important point it will be well to impress upon your attention, and that is, the great improvement produced by climacteric influences. A removal to a latitude where the temperature is scarcely ever below the freezing point has benefited and cured, when the disease is not too far advanced, more persons than the most effective remedies. Corroborative of this position, to which allusion has been made, is the fact that the negroes who have emigrated from the far South to a more northern latitude are most universally attacked. I would, therefore, recommend, as a great factor, a removal to such a climate as Florida or Southern California.

CASE OF ACUTE GLAUCOMA IN A CHILD OF EIGHT YEARS, CURED BY SCLEROTOMY, WITH AN ADDITIONAL ACCOUNT OF NINE SCLEROTOMIES PERFORMED FOR GLAUCOMA IN ADULTS.

BY M. LANDESBERG, M.D.,
Of Philadelphia.

The high expectations which were raised by the introduction of eserine into the therapeutics of glaucoma have totally failed. Even the enthusiastic admirers and supporters of this remedy had to yield to the evidence, to which I first drew the attention of the profession, that eserine is not only an unreliable, and in most cases worthless, remedy, in glaucoma, but also a very dangerous one, which, by its primary results, may lull the patient as well as the attending physician into a delusive security, endangering thus the favorable chances of another more efficacious therapeutic action.*

For the present, the only indication in cases of glaucoma must still be *operation*. Until recently, iridectomy was the only operative procedure to which we had to recur for the cure of glaucoma. To this old method, to which the name of Von Graefe is immortally attached, and which had been approved in thousands of cases, a new operative procedure has lately been added. This procedure, called sclerotomy, consists in making an incision at the scleral border of the cornea, as if about to form a flap for linear extraction of cataract without excision of iris, avoiding the prolapse of the latter.

Introduced by Von Wecker, enthusiastically recommended by Mauthner, sclerotomy has been tried by few oculists only. But it has still its future before it. It is not a method of fashion, in vogue to-day, abandoned to-morrow; it is a real enrichment of the therapeutics in one of the most fatal diseases of the human eye. Whether it will succeed to supplant totally iridectomy is an open question; but it always will keep a prominent place in the treatment of glaucoma. It is a simplification of the operative procedure; it has many advantages over iridectomy, and shares with the latter its curative effects.

In my article "On the Use of Sclerotomy in

* See my article on the "Therapeutic Use of Eserine in Glaucoma," *Knapp's Archives of Ophthalmology*, Vol. VIII, No. 2.

Glaucoma," just issued in Von Graefe's *Archives of Ophthalmology*, Vol. XXVI, No. 2, I give a full account of thirty-five sclerotomies, performed in the years 1876 to 1879, in the different forms of glaucoma. The results which I have obtained by this new procedure justify me in setting forth the following instances in which iridectomy has to be abandoned and replaced by sclerotomy. These instances are:—

1. Absolute glaucoma.

2. Secondary glaucoma, and glaucoma like conditions of the eye, as observed in iritis, serous choroiditis, in certain forms of keratitis, etc.

3. Cases of glaucoma in which iridectomy had been made, and the reappearance of the glaucomatous process indicates the repetition of the operative procedure.

In all other instances it entirely depends upon the personal feelings of the surgeon, whether in his proceedings he prefers to be backed by high authorities, or by his own judgment only. That sclerotomy is apt to bring about a full effect in all other forms of glaucoma has been illustrated by my first communication, and will receive further evidence from the following cases, which I have observed during the last year.

CASE 1.—C. B., workman's son, eight years old, had been suffering through all the summer, from intermittent inflammations in both eyes. In the first days of November, after a period of relative rest, intense symptoms of inflammation set in, in the right eye, the sight of which rapidly decreased. Examination, made November 10th, showed, left eye, some small infiltrations around the corneal border; right eye, multiple infiltrations of the cornea. Pronounced picture of subacute glaucoma. Aqueous humor dim; intraocular pressure intensly increased; pupil medium dilated; optic disc deeply excavated; intense venous hyperæmia of the retina. Vision reduced to counting fingers at 5′.

Instillations of eserine acted at first very favorably. Aqueous humor cleared up; tension decreased and pupil contracted somewhat. But from November 13th the morbid process exacerbated, evolving, on November 16th, into acute glaucoma. Vision was reduced to quantitative perception of light. Background of the eye could not be seen.

November 17th, I performed downward sclerotomy. Course of operation and of healing was normal. Tension decreased immediately after the operation. All symptoms of inflammation and irritation subsided very rapidly. On the second day tension was normal, anterior chamber clear and perfectly restored.

The final examination, November 24th, showed irritation vanished; pupil of normal shape and reaction; optic disc somewhat hyperæmic, but no trace of excavation; some retinal ecchymoses in the state of resorption. Vision (reduced on account of the existing maculæ corneæ) = $\frac{1}{40}$, Jæger 3. Field of vision normal.

CASE 2.—C. F., Farmer's wife, 49 years old, came under my notice June 19th, with acute glaucoma of the left eye. She was not prepared at the time for operation, but something had to be done in order to alleviate the severe neuralgic pain. In this emergency I resorted to paracentesis corneæ, repeating twice the escape of the aqueous humor. The relief was immediate, and there was considerable decrease of tension. When I saw the patient, twenty-four hours afterward, I was not a little astonished at the improvement of the eye. Symptoms of irritation were but slight, intraocular pressure was almost normal and pupil but very little dilated. Background of the eye showed slight excavation of the optic disc and venous hyperæmia. V = $\frac{1}{10}$. Field of vision intact. Improvement progressed in the following days, bringing complete recovery.

When, after eleven weeks of perfect health, acute glaucoma reappeared, I performed, September 19th, downward sclerotomy, with the most favorable result. Intraocular pressure diminished instantly. The course of healing was very short; the restitution complete. Tension and pupil became normal and V = $\frac{1}{10}$. Field of vision was free.

CASE 3.—O., grocer's wife, 59 years old, had iridectomy performed on her for acute glaucoma of the left eye, about two months previous to her coming into my notice. The operation afforded but temporary relief. Glaucomatous attacks set in again, with greater violence than ever before.

Examination, made September 15th, showed, left eye, media cloudy, anterior chamber shallow. Broad upward iridectomy. Eyeball of stony hardness. Fundus oculi cannot be seen. Vision reduced to counting fingers at 5′. Very intense symptoms of irritation

September 16th I performed upward sclerotomy. Course of operation was normal. Tension decreased but slightly after the operation. The healing process was interrupted by frequent acute exacerbations. After a long and tedious period of convalescence, the final result, October 29th, was: media clear; anterior chamber almost normal. Intraocular pressure only slightly above normal condition. Somewhat deep excavation of the optic disc. V = $\frac{1}{10}$, with + 6 Jæg. 3. Field of vision limited in the upward-inward quadrant.

Case 4.—F. G., shoemaker, 39 years old, had been suffering from intermittent inflammations of his right eye, from July 4th, when it was struck by a fire cracker. At first the paroxysms were short and subsided without impairing vision. In the last month the symptoms of inflammation remained stationary, and there was a gradual loss of sight.

Examination, December 15th, showed, right eye, deep ulceration on the lower third of the cornea, with diffuse infiltration; anterior chamber somewhat cloudy; pupil medium dilated; immovable intraocular pressure = T. 2; deep excavation of the optic disc; spontaneous arterial pulsation; vision reduced to counting fingers at 8′.

The administration of eserine brought complete contraction of the pupil, but no improvement whatever of the morbid process. December 20th, I performed downward sclerotomy. During the section small prolapse of iris occurred, the reposition of which succeeded. Tension decreased immediately, and the morbid symptoms subsided very rapidly; recovery was complete. Pupil and tension became perfectly normal and V = $\frac{15}{15}$. There was no excavation of the optic disc and no limitation of the field of vision.

Case 5.—D. C., weaver, 57 years old, applied to me February 4th, with subacute glaucoma of his left eye; pupil was medium dilated; intraocular pressure = T. 1; optic disc deeply excavated, with atrophic ring; spontaneous arterial pulsation. In the peripheric part of the retina there were some choroidal atrophies and pigment macerations. V = $\frac{20}{70}$, with + 6 Jæg. 5. Field of vision limited in the lower inner quadrant.

February 6th. Sclerotomy downward. Small prolapse of iris occurred after the section had been made, the reposition of which succeeded perfectly. Slight decrease of tension after the operation; healing process very favorable. Final result, V = $\frac{20}{30}$, with + 12 Jæg. 1. Field of vision much enlarged; pupil roundish; dilated but slightly above the normal condition, of fair reaction; intraocular pressure normal; excavation of the optic disc flatter.

Case 6.—G., peddler's wife, 56 years old, came under my treatment April 10th, with subacute glaucoma of the right eye. Anterior chamber was very shallow; pupil irregular, very sluggish, medium dilated; intraocular pressure about T. 1; deep excavation of the optic disc, with arterial pulsation. V = $\frac{20}{40}$ Jæg. 3, with + 10. Field of vision limited in the upper half, almost to the point of fixation.

April 11th, downward sclerotomy. Course of operation and of healing process normal. After the operation the intraocular pressure is below normal condition; it increases pathologically in the following day, and becomes normal on the third day; final result, V = $\frac{20}{40}$ with + 10 Jæg. 2. Field of vision considerably enlarged; pupil round, of almost normal reaction; no arterial pulsation; no change in the optic disc.

Cases 7, 8.—W. O., farmer, fifty-five years old, applied to me June 30th, in the following condition: Right eye, subacute glaucoma; pupil medium dilated, of slow reaction; tension = T. 1; optic disc slightly excavated, with atrophic ring; venous hyperæmia. V = $\frac{15}{18}$ with + 10 Jæg. 4. Field of vision limited downward and inward, in the latter instance almost up to the point of fixation. Left eye, chronic inflammatory glaucoma; ciliary veins greatly enlarged; cornea hazy, of diminished sensibility; anterior chamber somewhat shallow; pupil medium dilated, immovable; tension moderately increased; opacities of vitreous. Fundus oculi only indistinct. Vision counting fingers at 5′.

July 2d, downward sclerotomy in both eyes. In the right eye prolapse of iris during section, the reposition of which did not succeed. Iridectomy was made. In the left eye sclerotomy was successful; tension became normal; cornea cleared up; pupil and vitreous remained unchanged; vision improved to counting fingers at 15′; optic disc showed deep excavation and considerable hyperæmia. In the peripheric retinal parts there were choroidal atrophies and particles of pigment.

Case 9.—R., shoemaker's wife, forty-nine years old, came under my treatment with glaucoma simplex of both eyes. Iridectomy, performed June 21st, checked the morbid process and improved vision. While the condition of the right eye remained stationary, the left eye showed, from the first days of August, renewed increase of tension, with failing of the sight and narrowing of the field of vision. Sclerotomy, successfully performed, August 15th, had the most favorable result. Tension became normal; vision increased from $\frac{15}{100}$ to $\frac{15}{20}$, and field of vision enlarged.

Case 10.—C., peddler, sixty-seven years old, applied to me October 3d, in the following condition: Right eye, iridectomy upward; tension normal. V = $\frac{20}{70}$. Field of vision limited in the upper inner quadrant; slight excavation of the optic disc, with atrophic ring. Left eye, eyeball of stony hardness, intense sub-conjunctival and conjunctival injection; cornea opaque, with calcareous concrements; anterior chamber cloudy;

pupil ad maximum dilated; secondary catarrh; intense neuralgic pains. Iridectomy of the right eye had been made, for glaucoma, in Germany, in the year 1876. At this time the left eye had been blind for two years, without causing any annoyance to the patient. The latter set in in January, 1880.

October 4th. Downward sclerotomy. Course of operation normal. Healing process very slow and interrupted by frequent exacerbations. Final result favorable. All symptoms of irritation vanished and tension decreased very considerably.

General Remarks.—These cases show most evidently the high therapeutic value of the new operative procedure. In the nine cases in which sclerotomy was successfully performed, the latter succeeded to check the glaucomatous process, to reduce the morbid increase of the intraocular pressure and to improve vision. In these instances sclerotomy had the same beneficial effect as of a successful iridectomy, and had besides this great superiority over the latter, that, by leaving the iris intact it saved the eye from so many optical disadvantages (symptoms of dazzling, polyopia, etc.) which are often caused by the coloboma.

The first case which heads my present communication is highly interesting from many a point. Acute glaucoma is a very rare occurrence in children; it is the only one that I observed among 13,000 patients. The fine result obtained here by sclerotomy may be regarded as the best exemplification of the value of the new procedure. Before its introduction into the therapeutics of glaucoma, we had had only one recourse, in iridectomy. A permanent mutilation of the eye would have been the inevitable consequence; whereas sclerotomy restored the eye to its normal condition. The same favorable results have been obtained in Cases 2, 4, 5, 6, and 8. In Cases 3 and 9, in which glaucomatous process recurred after a successful iridectomy, sclerotomy made superfluous a repeated excision of iris, and checked the morbid process. In Case 10 sclerotomy gave abundant proof that in this instance it is the best substitute for iridectomy. In Case 7 the intention of the operation failed; prolapse of iris occurred, and iridectomy had to be made. It shows that we do not in the least endanger the condition of the eye by first trying sclerotomy; being enabled, in any emergency, to add to the section of the sclera the excision of a piece of iris, and thus change sclerotomy for iridectomy.

1912 *Arch street.*

Hospital Reports.

DROPSY IN CARDIAC DISEASE.

A Clinical Lecture delivered at the Hospital of the University of Pennsylvania, Sept. 27, 1879.

BY WILLIAM PEPPER, M.D.,
Prof. of Clinical Medicine in the University of Pennsylvania.

REPORTED BY WM. H. MORRISON, M.D.

Gentlemen—I have to-day two patients who come together very well as illustrating the different significance of the same symptom arising from different causes. This is particularly true in dropsy of the legs arising from cardiac disease.

This young man was admitted a few days ago. His history is as follows. He is twenty-two years old and a blacksmith by trade, but lately has been a bartender, and has taken more liquor than was good for him. He considered himself perfectly well, until three or four weeks ago, when he noticed pain in the chest, shortness of breath, decrease in the quantity of urine, inability to lie down, and afterwards dropsy of the legs. I do not think that his disease came upon him as an acute attack a few weeks ago.

I shall, in the first place, examine the heart. The heart is enlarged. Its action is very rapid, weak and irregular, and on auscultation I find murmurs. One of which, at least, is organic, that is, one resulting from insufficiency of the mitral valve. This is so harsh and strong, and transmitted so far downward and to the left, that there is no doubt but that it is organic. I cannot believe that the disease developed so rapidly as our patient thinks. It is probably a case where there has been a latent cardiac disease for some time, which has been aggravated by an acute attack. There is a great deal of congestion of the liver, and some congestion of the lungs. There is a high degree of dropsy of the legs. It is rather remarkable that the swelling of the feet is not nearly as great as that of the calf of the leg. This seems to be due to the hardness and tightness of the skin of the feet.

When we meet with a case like this, where we have a cardiac murmur and œdema of the legs, it is, of all things, important that we should learn the exact cause of the dropsy. The gravity of this œdema will depend entirely upon the cause that produces it.

Let me now call attention to this lady, who is fifty-nine years of age and has had swelling of the feet and ankles off and on for the past four or five years.

Here we find, upon examination, that the heart is exceedingly weak, feeble and frequent. We have here a marked *arcus senilis*, due to fatty degeneration of the corneæ. There is no valvular murmur, but there is evidently fatty degeneration of the heart.

In some cases this œdema of the feet is evidently connected with anæmia, a watery condition of the blood. The œdema in these cases is to be removed by the remedies useful in anæmia. There are other cases of cardiac disease, where the swelling of the legs is connected with a state of plethora. In other cases there is some ob-

structive disease of the heart, and great obstruction to the passage of the blood from the heart. This leads to venous congestion and effusion.

We meet with other cases connected with heart disease, due to the failure of the power of the heart to propel the blood through the whole circulation. Lastly, we meet with œdema in cardiac disease, where the kidneys become involved, and it is in this last condition that œdema becomes most marked.

In this lady we have had transient œdema coming on during the day and disappearing at night, no evidence of disease of the kidney, no organic disease of the heart, so that we must attribute this œdema to debility of the circulation.

In this young man we have a serious combination, because we find that the urine contains a large amount of albumen. In this case we have existing obstructive disease of the heart and a renal complication. This is a very common combination, and wherever you have swelling of the feet in cardiac disease, you should examine the urine carefully. We have not yet arrived at a clear understanding of this case. If we find only albumen in the urine, it will be probable that there is only congestion of the kidney, which will disappear when the congestion is relieved. We may find tube casts, showing that there is also organic disease of the kidney. Before meeting you again I shall have a microscopic examination of the urine made, and when we meet I shall take up the case at this point.

September 30th. Gentlemen, I again bring this young man before you, in order that we may study his case more carefully. Further examination of the urine has shown that there is no organic kidney trouble. There was, on Saturday, as you will remember, a considerable amount of albumen in the urine, the feet were œdematous and the dropsy extended some distance up the leg. We also found cardiac disease, and I told you that this case illustrated the relations between one kind of dropsy and cardiac disease, in that we had, with evident obstruction of the venous circulation, congestion of the kidney. This patient's expression when he came into the hospital indicated an intense degree of anæmia.

On Saturday I first asked you to observe the different relations that dropsy bore to cardiac disease. How, in some cases, it was due simply to weakness of the heart, debility of the cardiac walls, so that the heart was unable to propel the blood around the whole current of the circulation, and congestions were produced at the most dependent parts, and œdema became established; secondly, that patients with cardiac disease sometimes suffered from such impairment of nutrition that they became intensely anæmic, and, as in all cases where we have a watery condition of the blood, there is a great liability to the escape of serum and the formation of dropsies; thirdly, in cases in which there is marked obstruction or marked regurgitation at some orifice of the heart, we find that the venous system becomes engorged and dropsy ensues; and, lastly, in some cases of cardiac disease we find special congestions of various organs, the lungs, liver or kidneys, and when in connection with cardiac disease there is renal congestion, we are pretty apt to have dropsy, and especially apt to have œdema of the feet. So that, when you meet with a patient who has dropsy of the feet, the first questions to be settled are: What organ is at fault? Is there any organic disease? Is it the liver? In hepatic dropsy we have ascites developed. Secondly, are the kidneys at fault? Is the heart also at fault? Having found out, in any case of œdema, what organ or organs are at fault, we must next discover the special causes that exist.

I find in this man intense renal congestion and marked œdema, but no indication of inflammation of the kidney. Let us now study the condition of the circulation in the heart, liver, and kidneys. The apex beat is nearly in its natural position. When I place my hand over it there is a very unnatural feeling imparted to it. In the first place the impulse extends over a larger area than natural. The natural impulse extends over an area about the size of a silver half dollar. In the second place, there is a distinct thrill imparted to the hand, which is very marked and is felt with every impulse. On percussion I find that the cardiac dullness does not much exceed the normal. When I auscult the heart, there is a strong murmur heard at the base. One murmur and then one healthy sound. It becomes louder as I descend and go to the left. It attends the contraction of the ventricles—it is a systolic murmur. It is heard very powerfully around the left side of the chest. It is transmitted in the axis of the heart and in the direction that the blood takes in coming through the mitral valve. This is, therefore, disease of the mitral valve. The murmur attends the contraction of the ventricles when the mitral valves should be closed; therefore the mitral valves are insufficient and the murmur is a regurgitant murmur. Is there, also, any regurgitation through the tricuspid valve? The murmur is heard to the right of the heart, but it is lost too quickly. While we find that the jugular veins are filled with blood, they pulsate very little if at all. If there was insufficiency of the tricuspid valve the blood would be driven back into the right auricle and thence into the jugular veins, causing marked pulsation in the neck. Since the murmur is not transmitted much to the right, and there is no pulsation of the jugular vein, we may consider that, practically, there is no disease of the tricuspid valves.

The heart has, singularly, not become much enlarged, which makes me think that this is rather an acute case. If this had been an old trouble, and six weeks ago an acute affection had increased the trouble, we should find the heart enlarged. So that the absence of enlargement inclines me to believe that this is the result of an acute endocarditis. The aorta does not get as much blood as it ought. The consequence is that the patient is excessively pale, because, probably, half of the blood is forced back into the left auricle. This blood meets the blood returning from the lungs by the pulmonary veins, and, owing to the power of the left ventricle, it greatly impedes the passage of blood, and almost alters the direction of the current. In consequence of this, the passage of the blood through the lung is greatly impeded. Therefore it was that there was such intense congestion of the

lungs, shown by the moist and crackling râles heard over the base of both lungs. We still hear a good many râles over the base of the lungs, chiefly on the left side. The vessels, in this case, seem to be very strong and elastic, allowing such marked congestion. If they had not been so strong they might have given way, causing pulmonary apoplexy or hæmoptysis. Here we merely have congestion and some escape of serum. But, notwithstanding this, the congestion has done its full work. The right side of the heart has not been able to propel the blood through the lung, and thus we find that the right side of the heart has been greatly congested. The veins have not been able to empty the blood into the heart, as we see by looking at the jugular veins, and we find that the ascending cava, which carries the blood not only from the lower extremities but also from the hepatic and portal circulations, is also congested. In consequence of this, we find dropsy of the lower extremities and remarkable congestion of the liver. The epigastric and hypochondriac regions are much enlarged. When the man holds his breath you can see a pulsation in the epigastrium, and when the hand is placed over this region a distinct impulse is felt. When we examine the liver by percussion, we find that it extends from the fifth interspace downward, for a hand's breadth below the normal line. We have here an enlargement of at least 25 or 30 per cent. The edge of the liver can be felt at the point indicated on percussion. In this great congestion of the liver we find another proof of the strength and elasticity of the vessels in this young man. When the veins are so engorged, the watery portions of the blood usually exude into the peritoneal cavity, causing ascites. In this case there is, at present, no trace of ascites.

Here, then, we see what important results may follow this lesion of the mitral valves—congestion of the lungs, liver and kidneys, congestion of the right side of the heart, of the ascending and descending cavæ, congestion of the veins of the lower extremities and œdema. The œdema is owing, in part, to the great extent of the venous stasis; but this is not the only cause. We find a further cause in the special congestion of the kidneys, as shown by the extreme albuminuria. When the kidneys are thus congested, they are not able to perform their function properly, and some of the effete matter remains in the blood. This poisoned blood will not be transmitted as freely by the capillaries as will healthy blood, and congestion of the veins and œdema results. I would add that, probably owing to the small amount of blood passed into the general system, all the functions have been poorly performed, especially the digestion. Owing to this the patient's blood was very watery, and he was exceedingly anæmic. So that, in a case of this kind, we have several indications to meet in promoting the removal of the dropsy.

In regard to this pulsation in the pit of the stomach, you will often observe it in cases of this kind. The pulsation is sometimes so marked that it gives rise to the idea that the liver itself is pulsating. This sometimes occurs, but the pulsation is usually due to the transmission of the impulse from the heart itself. In this case I am satisfied that it is a transmitted impulse from the heart, which lies right on top of the liver, separated only by the diaphragm.

Now let us see what we should do for a patient in this condition. There are some cases in which we have nothing to do but stimulate the action of the heart. Take, for instance, such a case as I saw a few days ago in private practice. A man who has been overworked has a slight regurgitant mitral murmur which had never caused any trouble. He begins to lose general strength, is easily tired, the pulse becomes more frequent and feeble, face is pale, he has to stop and pant for breath on going up stairs, and his feet begin to swell, but there is no albumen in the urine. There is a little congestion of the lung, the surface is cool and the pulse is irregular, intermittent, frequent, very weak and small. Now, there is a case of œdema of the lower extremities, due solely to cardiac failure. You will find in such cases that absolute rest, small quantities of food at short intervals (because the digestion is weak), a little alcohol and plenty of digitalis, will in a few days cause the dropsy to disappear.

Now one of the elements in the treatment is, as I have said, absolute rest. You will find that the simple fact of making such a man sleep upon the ground floor will do more for his comfort than any drugs. It prevents him from having to lift the weight of his body in going up stairs, and also enables him to take exercise in the open air without going up or down stairs. The carrying out of this single element in the treatment of heart failure will often be followed by a disappearance of the dropsy, which seems almost miraculous.

Again, I spoke of the use of food in cardiac disease with dropsy. It might be said that in all such cases a diet of liquid should be preferred to a solid diet, for the reason that a liquid diet stimulates the action of the skin. This is true whether you give strong meat broths, beef tea, or milk; for after all beef tea is nothing but a mineral water containing various salts and a little albumen in solution. In the same way milk contains a great many salts and with these some albumen and sugar. Therefore a liquid diet of milk and broths is really a diuretic and diaphoretic in itself, while we also present the elements of nutrition in an acceptable form. I think I may say that in almost every case of cardiac disease with dropsy, a diet chiefly liquid is an important element in the treatment. This becomes more important when the digestion is weak or in any way deranged. In cases with hepatic and renal derangements I think it may be laid down as the rule, that a liquid diet is to be used. In case of hepatic involvement, in which there is a diminished secretion of bile, you will find that skim milk, or better, buttermilk, is very useful, because they contain no fat. The food should be taken at short intervals and in small quantities. A small quantity of green vegetables and lean meat will often have to be allowed, in order to satisfy the patient.

I spoke of alcohol, and this is a very important element in the treatment. The strong forms of alcohol are injurious, but the weaker forms, as diluted sherry or gin diluted with water, which, on account of its containing juniper berry, is diuretic, are

well digested and stimulate the action of the heart. Lastly, digitalis, which in this condition is the most valuable of all drugs, may be given freely, watching its effect. Twelve drops of the tincture may be considered an average dose.

In cases where we find that instead of there being failure of the heart, the heart is acting powerfully, and there is extreme nervous congestion, we have to alter our treatment. Here, while we use the same elements—rest and the modified diet—alcohol will be injurious and digitalis will not of itself suffice. We have now to take away this condition of congestion. We have to relieve the heart, lungs, liver and kidneys, by depletion of the engorged veins. For the relief of the lungs we apply dry cups over the lungs and administer saline expectorants. In the case of the liver, repeated doses of mercurials, followed by a saline laxative, should be used. In no condition of the system will you see better results from repeated doses of mercurials followed by a saline laxative, than in hepatic congestion from cardiac disease. Three grains of blue mass once or twice a week, followed by a saline, will be a most important and valuable element in the treatment. In the case of the kidneys, dry cupping and saline diuretics should be used. Buttermilk is also useful in this condition.

In our patient it is the last form of treatment that we need. Twice a week a pill of blue mass, and during the interval cream of tartar water taken freely, moderate doses of digitalis and a restricted liquid diet, constitute the treatment.

There is another question to be considered, that is, the treatment of the anæmia. Some practitioners fall into a stereotyped way of treating cardiac diseases. Some give only iron, others give only digitalis; but the only right way is to treat the disease according to the indications of each case.

Iron is useful where there is anæmia. It does not make much difference what form of iron is used, but preferably the diuretic salts, the potassii et ferri tartras, the citrates and the chlorides, should be used in cardiac dropsies. It should be given in large doses, beginning with a moderate dose and slowly increasing it. In the present case the patient has been taking the tincture of the chloride of iron, the effects of which have been shown by the improvement of color and digestion and the lessening of the dropsy. We have now spoken of the elements of heart failure, venous stasis and anæmia, as entering into the treatment of heart affections.

We will find that if our diagnosis in this case is correct, and there is no organic disease of the kidney present, and the albumen is simply the evidence of congestion, as we improve the tone of the heart, and restore the nutrition, the albumen will disappear from the urine. We will watch the case with interest, to see if this will be the course.

He is taking ten drops of the tincture of iron, with twenty drops of the tincture of digitalis. He will have dry cupping over the kidneys and liver, and blue mass twice a week, followed by a laxative.

The remarks that I have made to you indicate the rational treatment of cardiac dropsy. I have little doubt but that in the course of six or eight weeks this treatment will restore our patient to almost perfect health, but he will need to exercise the greatest caution.

The extent to which organic disease will diminish, if you can keep the heart perfectly quiet and have no tax or overwork placed upon it, is wonderful. Even in a patient as old as ours, I have seen organic murmurs actually disappear after two or three years. This result, which is rare in the adult, is quite common in children. So much so that if you can only induce the parents of a child with organic heart disease to follow out a proper hygienic and medicinal course of treatment, you will find, after several years, in a notable proportion of the cases, that the child not only remains well, but that from year to year, as you watch the case, the organic disease itself becomes modified, that the valves are being restored to their normal form, and that the signs of organic disease are slowly passing away.

I have watched cases of this kind, and after the child has reached adult life, I have been unable to find any signs of heart disease, and watching the case on through life there has been no development of cardiac disease.

When this man has recovered from his acute condition, I shall give him one or two grains of potassium with $\frac{1}{10}$ of a grain of corrosive sublimate. This will be stopped at intervals, so as not to derange the digestion. With this we shall combine rigid hygienic treatment, and we may hope to relieve, to some extent, the cardiac trouble.

Editorial Department.

Periscope.

The Value of Colotomy.

This operation is strongly recommended by Mr. Christopher Heath, F.R.C.S., in the *British Medical Journal*, January 1. He says:—

I do not, of course, mean that colotomy is desirable in every case of cancer, for the progress of some cases is slow, and much may be done to relieve pain and promote comfort by the use of morphia suppositories, or of starch and opium enemata, and the careful selection of bland and unirritating food and drink.

As regards the operation itself, I would say that, though it often is extremely easy and simple, yet, in some cases, it is of the greatest difficulty. In a case of obstructive disease, the colon is often distended and easy to reach; but, again, when distention is great, the colon may be contracted, and the small intestines overlap it completely, and cause great difficulty; or the peritoneum, distended with air, may closely simulate the bowel. Again, the anatomical arrange-

ment of the meso colon may be such as to render it impossible to reach the bowel without opening the peritoneum. Should the peritoneum be opened, I believe the best mode of proceeding is to bring up the colon to the opening, and stitch it carefully before opening the bowel—so that the two peritoneal surfaces may be well in contact and rapidly adhere, when a good result may be anticipated. It is said, by a distinguished lithotomist of the day, that every case of lithotomy has its own peculiarities; and the same may, I think, fairly be said of colotomy. Although my experience of the operation is now not inconsiderable, I must confess to a feeling of relief when I have fairly opened the colon without misadventure.

In the after-treatment of cases of colotomy, some little care is required in washing out, periodically, the diseased piece of bowel below the artificial anus, for, if this be neglected, the mucous secretion collects, and is apt to irritate. It is undoubtedly the fact, though it is difficult to explain it, that fecal matter does occasionally find its way into the rectum, in some cases; but the bulk of the fæces is, of course, discharged at the loin, and with great regularity, and singularly little discomfort. A simple bandage, with a pad of tow or wool, applied over the anus, is sufficient to prevent injurious friction of the part; but if, as sometimes happens, there be a tendency to prolapse of the mucous membrane, another air-pad may be added.

On Excision of Cancer of the Rectum.

An analysis of 140 cases of excision of cancer of the rectum is given by Dr. A. Kelsey, in the New York *Medical Journal* for Dec. last. From their study he draws the following conclusions:—

1. The fatal results which have thus far been recorded as following this operation nearly all occurred in cases where, from the extent of the disease, such a result was not improbable.

2. When the disease reaches above three inches, or involves neighboring parts to such an extent as to render its entire removal without injury to the peritoneum questionable, the operation is contra-indicated.

3. Although there have been a few cases of cure, such a result is so rare as not to justify the exposure of the patient to the risk of immediate death which attends the attempt to remove extensive cancerous disease.

4. The operation is chiefly valuable as a palliative measure, and as such it is applicable to cases where the disease has not made extensive progress.

5. As a palliative measure in proper cases, it compares favorably with the results of lumbar colotomy, both in prolonging life and in relieving pain.

6. The operation is not followed by an annoying incontinence of fæces, except in a small proportion of cases.

7. The operation is not a substitute for lumbar colotomy in cases where the disease has reached more than three inches from the anus.

8. There is no proof that the operative interference shortens life by hastening the progress of the disease.

Extraction of Foreign Bodies from the Ear.

At a recent meeting of the Surgical Society of Paris, M. Verneuil stated that when a child having a foreign body in the ear is brought to the hospital before any attempt at extraction has been made, there is rarely any difficulty in removing the foreign body. If, however, such attempts have been made, chloroform should be employed. If the tissues have been irritated, if the membrana tympani has been torn, the application of an instrument, however gently, causes more or less severe pain and provokes movements so violent that the auditory organs are in danger of being seriously injured. Chloroform has this great advantage, that by rendering the patient insensible to pain, it prevents violent motion. M. Verneuil stated that he has seen children brought to the hospital by physicians in attendance on them who were firmly convinced of the presence of a foreign body in the meatus externus, and who, under this conviction, had introduced instruments and made attempts at extraction, with the effect of lacerating the tissues, tearing the membrana tympani, and even laying bare the petrous bone, adducing as proof of the presence of a foreign body the sound given by the instrument on striking the bone thus uncovered. M. Verneuil succeeded with difficulty in convincing them of their error. Having administered chloroform to the unfortunate child he then demonstrated that the body sought for existed only in imagination, and that the only reality was the injury to the child. According to M. Verneuil the methods of treatment should be employed in the following order: First, injections of water, suitably practiced; secondly, if the foreign body resists, chloroform to be administered without hesitation, as instruments may then be employed without danger to the patient, as, for instance, a forceps or scoop to seize or draw out the foreign body.

The Diagnosis of Rheumatic Gout.

Mr. Jonathan Hutchinson says, in an article in the London *Medical Times and Gazette*:—

Of the peculiarities presented by joints which have suffered from rheumatic gout, two stand out before all others in their value as means of diagnosis. I allude to the dry grating caused by the removal of cartilage, and the development of lips. We may venture to assign the chief place to the second of these, for it is the one which is earliest to be found. Grating is never present excepting at an advanced stage, and although very characteristic then, its value becomes, of course, much limited by that fact. Nodosities and lips, on the contrary, are among the very earliest of the products of this malady, and are often, indeed, present before the patient is aware that he has had any inflammation in the joint concerned. Nor have we, so far as I know, any reason to think that they occur to any characteristic extent in association with any other causes. On the contrary, I believe that their diagnostic value is as great in rheumatic gout as is that of chalk concretions in true gout. Our differential definition of rheumatic gout may then, I think, be based on these peculiarities, and we may say that any form of joint disease which tends to the pro-

duction of lip-like outgrowths at the margins of the cartilages has a claim to be placed in this category. I have already hinted that there are many varieties, some of them probably of considerable clinical importance, which are grouped under this head, and that in a certain large group, occurring in patients under middle age, while removal of cartilage is common, outgrowths of bone are rare, and if present usually small.

For the last few years I have been in the habit of using these outgrowths for the purpose of diagnosis, in a somewhat novel way. I had often been struck by the marked prominence of these rheumatic lips on the condyles of the femur in museum specimens, and it occurred to me that they ought to be perceptible during life. I examined the knees of a few patients who had the disease in an advanced stage, and found that I could detect them very easily. Afterwards, with some practice, I found that I could appreciate their presence even in comparatively early stages, and also that they are frequently present when the patient has no external deformity whatever. By degrees, and after the examination and comparison of a great number of patients, I have come to rely with much confidence on this symptom. If you wish to employ it successfully you must first practice carefully on healthy joints. In many, if not in most, there is a ridge at the part referred to, more or less resembling the pathological lip. The distinction between health and disease can only be acquired by practice. In examining a knee I prefer to place myself in front of my patient, and to employ both hands at once. I place the finger-tips of one hand flatly over the edges of the one condyle, and those of the other on the opposite, and then direct him to bend and extend the joint slowly several times in succession. In this way you may find the edges and appreciate their elevation without risk of error. I much prefer to use the fingers flatly at first, and not to employ their tips, as I think there is less risk of error in estimating elevation; but afterwards I use the tips in order to determine whether the lip overhangs. In well-marked cases it curls outwards.

These condyloid crests, as I have already observed, are not to be expected in all cases. As a general rule they are present only in those who have passed middle life. You must not expect to find them in the young. In the latter, absorption of cartilage without osseous outgrowth is the rule. In the aged however, these crests are invaluable as symptoms. I have very often recognized them in cases in which the patients were not aware that the knees had ever suffered. I have often been able by their aid to say which knee had suffered most frequently, and have found the patient's statement confirm my inference The symptom is of especial use in those cases in which we are consulted, not on account of joint affections, but for iritis, or lumbago, or a skin disease which we suspect to be of arthritic origin.

Prognosis of Cerebral Hemorrhage.

M. Jorisenne has published an interesting memoir on this subject. in the *Annales de la Soc. Med. Chirurg. de Liège*:—

The prognosis for the first few hours after the attack should be guarded; according to Rosenthal the diminution of intra-cerebral pressure and the regularization of the circulation is marked by the return of consciousness and speech. the respiration and action of the heart remaining calm, deglutition, motility and tactile sensibility becoming re-established at the same time that a rise of temperature occurs. On the contrary the immediate prognosis is bad when there is persistent coma, lasting thirty-six or forty-eight hours, with complete loss of reflex irritability, irregular and snoring respiration, small pulse with intermissions in its beat, paralysis of the sphincters with dilatation of the pupils, which were primarily contracted. A sudden fall of the temperature to 35°–35.4° C., persisting for several hours after the apoplectic attack, is one of the signs of a fatal termination (Bourneville); a great elevation of temperature (to 41°–42.5° C.) is also of bad augury.

Convulsions and contractures occurring at this early stage indicate that effusion has taken place into the meninges or ventricles, and recovery after such lesions is very exceptional. M. Jorisenne, in his memoir, devotes more attention to the prognosis after the first few days have passed without fatal result.

Persistent cephalalgia is generally unfavorable, as it indicates a cortical or cerebellar lesion.

Intellectual derangement, when it persists several weeks, generally passes into imbecility, or into weeping dementia (Brouardel).

Aphasia, rare in cerebral hemorrhage, but more frequent in softening, persists long after amelioration is observed for the paralysis; if, after a few weeks, it passes into paraphasia, speech will probably be reëstablished; by paraphasia is understood the substitution of one word for another, the patient in favorable cases being conscious of his errors.

Verbal amnesia is of more favorable augury than aphasia; the patient has forgotten the words but can repeat them after another person, and may be thus taught his letters, etc., as a child. Hemiplegia is a grave and common symptom; cross hemiplegia is of more serious import, and if there are facial troubles is a sign of meningeal hemorrhage at the base.

If, in conjunction with cross hemiplegia (hemiplegie alterne) there are pains at the occiput, troubles of hearing, of deglutition, and of respiration, death is imminent. When, after a variable period, contractures appear in the paralyzed limbs, the paralysis will, thereafter, remain permanent.

Anæsthesia persists rarely after the ictus; when it supervenes later it proves permanent. Deafness is grave, for it indicates that the lesion is situated at the base. Conjugated deviation of the eyes with rotation of the head toward the paralyzed side announces a rapidly fatal termination (Desnos); rotation of the head toward the non-paralyzed side is transitory. Visual troubles are rarely of long duration; atrophy of the optic nerve is limited and the hemorrhage must be very abundant to induce sufficient compression of the cavernous sinus to bring on hydropthalmia or sanguinolent effusion into the retina.

Cerebral atrophy, eschars, and pulmonary le-

sions are frequent consequences of cerebral hemorrhage.

Lung troubles kill the great majority of those who survive the attack (Charcot, Brouardel). Repetition of the attack is the rule in cerebral hemorrhage; the lesions are ordinarily multiple and each attack aggravates the situation.

According to Durand-Fardel, death is common when the attack supervenes in subjects from sixty-five to seventy years of age; recovery more frequent from forty to fifty.

The Induction of Abortion as a Therapeutic Measure.

At a late meeting of the Obstetrical Society of London, Dr. Priestly read a paper on this subject. He considered that the indications for the induction of abortion, as distinct from the induction of premature labor, had never been laid down with sufficient precision in this country. It was usual to say that each case must be judged on its merits, and this lack of rules might unfortunately lead to serious abuse. Examples had repeatedly come within his knowledge, where abortion had been provoked for reasons which seemed to him quite inadequate. Though the medical man was no doubt acting in entire good faith in these cases, it would have been very difficult to sustain his action in a court of law. For instance, in one case abortion was induced at the fourth or fifth month, on account of a bad rupture of the perineum at the last confinement. In a succeeding pregnancy a sound was introduced with a similar object at the end of a month; this, however, had no effect, and she went to full term, and had an easy and natural labor. In a second instance an attempt was made to induce abortion at the second month because the patient had aborted not long before, and it was feared that pregnancy had recurred too speedily, while a much desired journey would have to be postponed if miscarriage recurred at the same period as before. Fortunately, the attempt failed, and the patient went to her full term. It was necessary to remind wives and mothers that even spontaneous abortion is often more damaging to health than natural parturition, more frequently lays the foundation of disease, and if repeated, abridges the period of youth and comeliness. These risks were necessarily greater if abortion was induced. The reasons which may be adduced as justifying the induction of abortion are the following: (1) Pelvic deformity so great as to preclude the birth of a viable child. (2) Narrowing of genital canal by tumors, cicatrices, or cancer, so as to prevent the passage of a viable child. Great care was here necessary not to over-estimate the amount of obstruction. If a series of cases of Cæsarean section with fair success should occur, the reasons for inducing abortions in such instances would be undermined. In cases of cancer there was fair ground for this operation, since the woman had but a short time to live in any case. (3) In obstinate vomiting in pregnancy, when all other expedients are fruitless, and a fatal result is anticipated if relief cannot be afforded. (4) In eclampsia abortion should only be induced as a last resort, to save life. (5) In irreducible retroversion or retroflexion of the gravid uterus, but only when life is seriously threatened, not merely because the displacement is irreducible. (6) In severe hemorrhage. (7) In certain other diseases where the complication of pregnancy is undoubtedly endangering life. The responsibility of inducing abortion should never be undertaken without a consultation of two or more medical men, and M. Tarnier had even suggested that a legal declaration should be made to the public prosecutor in every case. He would lay it down that the induction of abortion is only legitimate when the life of the mother is so imperiled by the continuance of pregnancy that emptying the uterus presents itself as the only alternative to save the mother. In insanity, chorea, and the like, the proper treatment was probably to treat the morbid conditions, and leave the pregnancy to take care of itself.

Reviews and Book Notices.

NOTES ON CURRENT MEDICAL LITERATURE.

——The *Physician's Daily Pocket Record* for 1881, published at the office of the Medical and Surgical Reporter, has the particular convenience that, begun at any time of the year, it holds good for one year from date. All those, therefore, who have not yet provided themselves with a Pocket Record or Visiting List, will find this the most desirable one in the market. Price for thirty-five patients, $1.50; to subscribers to this journal, $1.25

BOOK NOTICES.

How to Use the Forceps. With an Introductory Account of the Female Pelvis, and of the Mechanism of Delivery. By Henry G. Landis, A.M., M.D., Professor of Obstetrics, etc., in Starling Medical College, New York. E. B. Treat, Publisher. pp. 168.

Perhaps no accoucheur, when called in consultation, to aid in a forceps delivery, but has seen, again and again, the absolute want of knowledge, on the part of the medical practitioner, of the mechanism of delivery. Carus' curve is, to many, an unknown land, and as our author forcibly states, the effort is made to drag, by main force, the head through the pelvis, without the slightest regard to the pelvic curves. The forceps, in such hands, become a curse, in place of, as it always should be, a blessing. If every one who aims to practice midwifery will follow th teachings of Dr. Landis, the employment of the forceps will speedily be demanded rather than dreaded, by the parturient woman and her friends.

In order that traction by the forceps shall accomplish all that is required, the author counsels the placing "of the left hand so that the ball of the thumb comes over the locks, while the index finger rests upon the upper arm of one blade, and the middle finger upon the other. Now, while the right hand holds the handles almost at rest, the fingers of the left *push* upon the blades so as to move them and the contained head downward, backward, and a little to the left of the median line. Secondly, while the fingers are pushing downward in this way, we may also make use of them as a fulcrum, and by elevating the handles, cause the blades to move in an opposite manner; but care must be taken that the force thus applied by the right hand is not enough to overbalance the downward pressure of the left, else we will merely extend the head without propelling it." The principle is, that *pushing*, and not *pulling*, is the first step in traction. That is, continued, slight pulling, with elevation of the handles, while the blades are pushed down. Thus the author compels the head to emerge in the line of the pelvic curve. Nor does he find great force required, as of two men pulling at the handles, or the foot braced against the bed. This simple manœuvre of Dr. Landis readily explains the apparently miraculous results observed in the lying-in chamber when two powerful men, having exhausted themselves in futile efforts to extract a head, give way to a skilled accoucheur, who, with but slight effort, accomplishes the wished for purpose.

We are glad also to note his earnest condemnation of the "to and fro," or pendulum movement of the forceps. He justly accredits our townsman, Dr. Albert H. Smith, as having given the best refutation of the fallacy of this method.

We cannot forbear quoting his rule for the time to use the forceps: "Whenever the second stage of labor has lasted two hours, and the head is still stationary, or advancing with great slowness, we should inform the patient that we are about to apply the forceps. If we explain the necessity and propriety of the operation, we will rarely find any objections, especially if the woman is already tired of her fruitless sufferings. This rule may be deviated from, according to the circumstances of each case, but it will more often be proper to shorten it than to protract the time of giving relief. There is no need of keeping the woman in suffering for hours, solely that she may deliver herself; and still less for keeping her under the noxious influence of an anæsthetic for hours, when we can safely extract the child at will."

The book is of decided value as an addition to obstetric lore, and we hope that many will buy it, and profit by its teachings.

Handbook for Coroners, containing a Digest of all the Laws in the thirty-eight States of the Union, together with a Historical Résumé. A Guide to the Physician in Post-mortem Examinations, etc. By John G. Lee, M.D. Philadelphia: Wm. Brotherhead, 1881. Cloth, 8vo, pp. 288.

The author does not claim more for this work than that it is a compilation. In fact, the nature of his subject does not permit much more. The first chapter gives a historical sketch of Coroner's law; the second describes the duties, compensation, etc. of the physician who is called upon by the coroner to aid in the medico-legal researches rendered necessary by a case of death; a third chapter is on the aspects and surroundings of death. The remainder of the volume is occupied by a synopsis of the laws relating to coroners and their duties in the different States; winding up this rather gloomy topic with a little relief in the shape of a dozen pages of humorous anecdotes and descriptions of funny incidents in coroner's courts. It is a volume which all who are occupied with this branch will do well to possess.

The manufacture of the book is not so good as it should be.

Compendium of Microscopical Technology. A Guide to Physicians and Students in the use of the Microscope and in the Preparation of Histological and Pathological Specimens. By Carl Seiler, M.D. Illustrated. Philadelphia, 1881. D. G. Brinton. Cloth. Price $1.00.

In this small book of upward of 112 16mo. pages, containing sixteen illustrations, the author and publisher present to the profession a very handy little compendium of nearly all that is really essential to be learned by the inexperienced who would unravel for himself some of the fundamental truths of histology. It will, we think, very satisfactorily meet a want which the student has often felt when he has attempted, alone and without the guidance of an experienced instructor, to penetrate some of the mysteries of the microscope. As the author states in his preface, other books on this subject, although excellent and indispensable to the advanced student, are far too comprehensive and perplexing, by the redundancy of methods and formulæ recommended, for the beginner.

In the present volume the author has sought to give a clear and concise description of a few

processes which he himself has found to give uniformly satisfactory results. Histological details have very properly been eschewed.

In the first chapter the student becomes acquainted with the essential points of a good working microscope, and learns how to manage the light, the micrometer and the camera lucida.

The three following chapters briefly and lucidly discuss the preparation of animal tissues, the principles of section cutting, and some of the more commonly employed means of differentiating histological elements.

Two more chapters treat, in the same satisfactory manner, of injection of the blood vessels, and of mounting and permanently preserving thin sections and other specimens.

In the last two chapters the author succinctly considers the best methods of preparing vegetable tissues and insects, and some of the physical and chemical conditions for successful photomicrography.

Of course, a little book of so few pages could mention scarcely more than the barest essentials; on the whole, we think the author deserves congratulation upon fairly attaining the object which at the outset he aimed to reach, namely, the production of a useful, brief, clear and practical little guide to the early student of microscopy who would be self-taught.

Finally, we should not forget to commend the publisher for the neat and excellent style in which the mechanical part of the book before us is presented to the profession.

A Practical Treatise on Diseases of the Skin. By Louis A. Duhring, M.D., etc. Second edition revised and enlarged. Philadelphia, J. B. Lippincott & Co. 1 vol. Cloth. 8vo. pp. 644.

The opinion which we expressed of this treatise when it first appeared (in 1876), has been amply borne out by the verdict of the profession. It impressed us then, for the purposes of the general physician, and even for most special students of dermatology, as the most satisfying volume, not only from an American author, but from any author in our tongue. It has, moreover, advantages over any foreign treatise, inasmuch as it describes cutaneous diseases as they are found in the United States, and it is well known they sometimes differ considerably from those prevalent in other climates and continents.

The author has given the present edition a conscientious revision, supporting the results of his own daily extensive observation by frequent reference to the book and periodical literature of his subject, which has assumed very large proportions in the last decade. Indeed, he thinks that no specialty in medicine has grown so rapidly; and though in this opinion we think he may be supported by the specialists of other branches, he certainly has found very considerable additional matter of real practical interest to insert. There are quite a number of new articles; the anatomy of the skin is presented with new lights, and about one hundred pages of matter have been added. Very few sections but have received some editorial attention. As it stands, the volume is an admirable summary of practical dermatology.

Diagrams of the Nerves of the Human Body. By Wm. Henry Flower, F.R.S. Third edition. Philadelphia. Presley Blakiston, 1881. 4to. Cloth. Six plates and text. Price $3.50.

These plates exhibit the origin, divisions and connections of the nerves, with their distribution to the various regions of the cutaneous surface and to all the muscles. They were originally published in 1860, and aim to render the nervous distribution—always a difficult subject—readily understood by those who would acquaint themselves with it. The nerves and ganglia are clearly represented in six plates, printed from stone, each plate being accompanied by a page or more of explanatory text. These plates represent I, II, the cranial nerves, III and IV, the spinal nerves, V, the sympathetic system of nerves, VI, distribution of the cutaneous nerves. The impressions are well made, and no doubt the diagrams will prove quite useful for those fo whom they are designed.

A German-English Dictionary of Words and Terms used in Medicine and its cognate sciences. By Fancourt Barnes, M.D., Lond., etc. Philadelphia, Presley Blakiston, 1881. 1 vol., 8vo., pp. 300. Price $3.00.

Dr. Barnes, in the preface to this dictionary, does not appear to us to give proper credit to Dr. George R. Cutter's similar work, published in 1879, by the Putnams. He has substantially copied the latter, even to the typographical display, and merely inserted a number more words from other sources. He indeed mentions Dr. Cutter's work among others, but does not even give it the first or second place on his list. Many of the words he has added are needless additions, as not particularly or at all medical or scientific, as—to look at the first page only—eel, eagle, kite, superstition, etc. Nevertheless, he has materially added to Dr. Cutter's medical vocabulary, and in a certain measure supplanted it, until the former revises and extends his list.

THE

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D. G. BRINTON, M.D., EDITOR.

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THE EFFORT TO ESTABLISH A BOARD OF HEALTH.

The effort which is making in this State to form a State Board of Health should enlist in its favor the active coöperation of every medical man in the commonwealth. If this is done, this and any other wise and beneficent legislation of the kind can easily be carried through. The medical profession has but to exercise its influence, and represent to every member of the Senate and House the real importance to the community of such a Board, and certainly there will be no material opposition to it.

By such deliberate and general action was secured the passage of the State Board of Health bill for New York. Dr. STEPHEN SMITH says:—"It was determined to rely on the medical profession of this State for the necessary influence to secure the requisite vote in each House to pass the bill." Immediately after the election last fall, the name and post office address of every member elect was obtained, correspondence was immediately opened with an influential medical man in the immediate neighborhood of each member, and he "was requested to take an early opportunity to explain to his representative the necessity of establishing a State Board of Health, and to urge him to support such a measure if introduced into the Legislature." The response to this appeal was unanimous and most cordial, and before the meeting of the Legislature a large proportion of the members elect had expressed themselves favorable to the measure. The next step was to secure the preparation of a proper bill, and the "third step was to secure for the bill the personal care of a competent member of each House." In the meantime petitions were extensively signed by leading citizens throughout the State, and the coöperation of thoughtful persons and favorable newspaper editorials were enlisted, by the circulation of a pamphlet entitled, "Care of Life and Health in the State of New York." And "so the State Board of Health became a law."

The Committee, Drs. W. B. ATKINSON and BENJAMIN LEE, appointed by the Pennsylvania State Medical Society to urge the formation of a Board of Health, have addressed to the profession of the State a circular, which reads:—

In the interest of the lives and health of our vast population, we beg leave respectfully to urge upon you the importance of bringing your personal influence to bear upon your Senators and Representatives in the Legislature of the State in favor of the immediate passage of a bill to create a State Board of Health. Since the last meeting of the Legislature the States of New York and New Jersey have both taken this important step, and Pennsylvania is now left with a small and rapidly lessening minority of those Governments which still neglect the sanitary interests of their people. We are convinced that a determined and concerted effort on the part of the entire profession is all that is needed to remove this opprobrium, and thus restore our noble State to the front rank of progressive Commonwealths.

It is sincerely to be hoped that this appeal will fall on attentive ears. That this State has not a Board of Health already cannot be called anything short of discreditable for a commonwealth of such intelligence and wealth; and the discredit rests on the physicians of the State, who now have and long have had it in their power, by united action, to obtain it from the Legislative branch of the Government.

No greater economy can be practiced by

commonwealth than to create an efficient Health Board, and give it ample funds and legal authority to protect the health and lives of the community. To prevent disease and to prolong and protect life is to add directly to the wealth of a community as well as to its happiness. To neglect such much needed and obvious precautions indicates great neglect of the true welfare of the State, great ignorance of what that welfare is based upon.

Let this reproach no longer rest upon us; let this excellent measure no longer fail, from the lethargy of the profession.

Notes and Comments.

Porcelain Pessary Twenty Years in the Vagina.

At a meeting of the Societé Medico-Pratique, of Paris, M. Rougon related the case of a woman, fifty-three years of age, who had a pessary introduced twenty years previously. She found so much difficulty and pain in removing it, that after the first three years she left it in place. From time to time she experienced slight pains in the hypogastric and lumbar regions; and there was a sensation of heat with slight discharge from the vagina.

But in 1877 she suffered from acute pain in the lumbar region, with dysuria, which led her to consult a physician, who on examination found the pessary, which he extracted with great difficulty. Examination with the speculum demonstrated the presence of a diaphragm, with central depression, which was all that remained of the os; a uterine sound could be introduced but one centimetre through the opening in this central depression.

Curious Form of Coryza.

M. Bauwens, in the *Journal des Sci. Med. de Louvain*, Dec. 20th, 1880, reports the case of a young man, nineteen years of age, who had a sudden attack of violent headache, accompanied with a feeling of weight and stoppage in the posterior nares. Then, after a fit of sneezing, there supervened an abundant flow of serous liquid from the nostrils; this lasted for three or four hours, the liquid becoming thicker.

After this attack he suffered from the same at first every third day, and later on every day, and even twice a day; the attack was always the same and there was no fever; rhinoscopic examination revealed a congested state of the Schneiderian mucous membrane, but no ulcerations or polypi.

Astringent injections of every description, as also of solutions of chlorate of potash, proved of no benefit, and it was determined to try sulphate of quinine, on account of the periodicity of the attack. For four days there was no attack, but the benefit was but momentary.

Arsenic was then given, in doses of 1 milligram gradually increased to 1 centigram, and the success was immediate. There has been no access for three weeks, and there exists no longer any trace of inflammation of the olfactory mucous membrane. Trousseau has cited cases where similar attacks of coryza alternated with the habitual manifestations of asthma, but the success of arsenic in this case would seem to prove for M. Bauwens that the periodical attacks were a manifestation of intermittent fever (forme larvée) particularly as there existed no antecedents pointing to the existence of any asthmatic tendency.

Hemorrhagic Pleural Effusions.

In a recent monograph on this subject, by Dr. Charles Nélaton (of Paris), he gives the following as the conclusions at which he has arrived:—

(*a*) Effusions of blood into the pleuræ may be due—1. To a lesion of the vessels of the thoracic walls (the intercosto-mammary). 2. To a lesion of the intra-thoracic vessels. In the latter case the hemorrhage is generally furnished by the arterial branches which accompany the bronchi, of the second and third magnitude.

(*b*) Respiration favors the hemorrhage. The accumulation of blood in the pleural cavity quickly arrests the hemorrhage.

(*c*) The effused blood coagulates entirely and immediately; it then separates into two parts—coagulum and serum.

(*d*) If the effusion is not very abundant the serum is re-absorbed within three or four days, and when the phenomena of inflammatory reaction supervene, they centre round the coagulum, and finally encapsule it.

(*e*) If the quantity of the effused liquid is very great the exuded serum is not absorbed at the time when the inflammatory reaction comes on. Then the remaining serum becomes altered, and its presence gives rise to accidents.

(*f*) The symptoms and prognosis of the hæmothorax are not identical in the two cases. In the former case the prognosis is favorable; in the latter it is grave.

(*g*) The treatment of the cases also differs.

For the former class of cases occlusion should alone be practiced; for the latter class the pleural effusion must be evacuated.

(*h*) Capillary aspiration may be tried first.

(*i*) If the fluid so drawn out be purulent, or if its flow be imperfect, the operation for empyema must be undertaken.

Preserving Subjects for Dissection, Etc.

From the appearance of the subjects in the dissecting rooms of our best medical colleges, some simple but effectual method of preservation would seem to be urgently needed.

M. Hairion, in a report on the medical Section in the last Paris Exposition (*Journal des Sci. Med. de Louvain*, November, 1880), speaks of the different systems of preservation on exhibition:—

1. Laskowski injects into the arteries glycerine and carbolic acid, and his preparations remain in a fit state for dissection for six or eight months.

2. Prof. Efisio Marini, of Naples, presented admirable dry preparations, which on immersion in a certain liquid become softened and appear fresh, having the natural color of the various tissues. In another preparation putrefaction had been arrested after the twentieth day. These preparations received the approbation of MM. Nélaton and Sappey. Unfortunately Prof. Marini's method is kept secret, but there is no reason to suppose that it differs essentially from that of Dr. Wywodzoff, chief surgeon of the St. Petersburg military hospital, who embalmed the body of Anson Burlingame, which was found in excellent state of preservation several years later.

Dr. Wywodzoff makes as few incisions as possible, and does not open the cavity of the abdomen or of the thorax. He opens only the carotid and crural arteries, and after many experiments has arrived at the following conclusions:—

1. The best liquid to inject an entire subject, a limb, or a visceral organ, is the following solution:—

WYWODZOFF'S FLUID.

℞.	Glycerine,	4 pounds.
	Water,	2 pounds.
	Thymol,	3 grams.

2. A quantity of liquid about one-half the weight of the subject is necessary.

3. The liquid should be slowly injected; if one limb is to be injected, the denuded part should be immersed in boiling water and the medullary canal stopped up with a cork.

4. The veins accompanying the carotid and femoral arteries, the jugular and femoral, should be opened near the openings in the arteries and the liquid injected until it appears in these veins.

5. When the liquid commences to pass by the mouth of the subject, the trachea must be opened, a cork inserted and a stout ligature applied.

6. When the capillaries of the skin are filled, the operation may be considered as finished; if one of the limbs should appear not well done, it should be separately injected.

Men as Nurses.

The *Lancet* represents what may be called the hide-bound conservative English medical opinion. Not only does it scorn women as doctors, but now it intimates that they are not much as nurses. In the issue for December 11th it says, editorially:—

"It is a mistake to suppose that women are necessarily the only good nurses. In the opinion of some persons who claim to be judges of the question, they are neither so quiet, so self-possessed, so precise, nor so strong as men. It is alleged that no man who has been nursed by a gentle-handed male servant would desire, in any subsequent illness, to be attended by a female. It is said that whatever element of the female character or influence is desired in the sick chamber, can be best contributed by the presence of a mother, a wife, or a sister. When the circumstances exclude these forms of the luxury it can seldom be a necessity. If the employment of men to nurse men were encouraged a great difficulty would be surmounted, and a good social reform begun. The whole subject is one of pressing interest, and the hints we have now thrown out are intended to state the question rather than to discuss it. There is urgent need to uproot growing prejudices, and to amend grave errors and misconceptions to which special circumstances have given rise."

Dry Cupping in Typhoid Fever.

Dry cupping was recommended in 1857, by Behier, in cases of typhoid fever where the thoracic complications were predominant.

In a recent article in the *Journal de Med. et Chir. Prat.*, M. Huchard has shown, by numerous observations, that dry cups may be employed with benefit in very many cases of dothienenteritis.

He uses them in all, except very benign cases; typhoid fever is essentially a congestive disease; lungs, kidneys, intestines and even the brain are loaded with blood, and this state must be energetically combated. Dry cups act by derivation,

rendering the capillary circulation more active; substituting cutaneous congestion for active visceral hyperæmia; under their influence, the general condition improves, there is less stupor; in certain cases, even, there is a fall of temperature. M. Huchard has followed this course of treatment for two years, and cases at present in his service demonstrate the good results of the treatment.

The cups must be freely applied twice a day, morning and evening; twenty or thirty must be applied at the lower posterior part of the chest and on the abdomen; they must be left in place a quarter of an hour. The application is often painful in regions where there is little cellular tissue under the dermis, but the advantages drawn from the treatment more than counterbalance this drawback.

CORRESPONDENCE.

Product of Cow Vaccination.

ED. MED. AND SURG. REPORTER:—

The prevalence of smallpox in your city at this time revives the interest in a mooted question—namely, the relations of variola and vaccinia.

In the first editions of his work on the practice of medicine, Dr. Flint says that vaccine virus may be and has been obtained by inoculating the cow with variolous matter obtained from the human subject, and that the matter thus obtained will, when inoculated into the human subject, produce the true vaccine disease.

You have, on more than one occasion in the last few years, denounced this as a dangerous error, in your journal, and Dr. Flint himself, in the later editions of his work, has recanted the opinion formerly expressed.

But now comes Dr. Edward Cator Seaton, in "Reynold's System of Medicine," who says the "common origin of smallpox and cowpox may be considered as established."

He cites no less than six instances, where vaccine virus has been obtained by inoculating cows with human variolous matter, concluding with that of Mr. Badcock of Brighton, England, who, he says, succeeded in thirty-seven separate occasions in obtaining genuine vaccine lymph by inoculating cows with the lymph of human variola.

I think it will be a matter of much interest to your readers to have your present opinions on this subject. RICHARD DINGEE, M.D.

Newportville.

[We have submitted this question to several experts in the matter, for instance, to the late Dr. B. Rush Senseny, who, we believe, made an experimental investigation of this subject, and they all agree that lymph from the vesicle on a cow produced by vaccination with humanized virus is not effective; nor does the cow exhibit the same symptoms as when inoculated with vaccinia. We are always desirous of new light, however. Mr. Seaton is not an authority on bovine virus. ED. REPORTER.]

Weights and Measures.

ED. MED. AND SURG. REPORTER:—

For many years I have been noting the use and advancement of the French weights and measures; especially so far as they are applicable in writing prescriptions. And with no fault to find, provided that we are French.

It is evident, however, from the past, that it will be a long way down through the centuries before they will be adopted generally by English speaking peoples, and perhaps never.

The grain, minim, etc., have come to be ineffaceable upon the English brain; and it seems somewhat unfortunate, too, that none of our weights and measures can be expressed by that system without a fraction.

Might not a change be made, though very slight, which would render our method of prescribing much less objectionable, as well as equally simple and accurate? I have so concluded. First, by discarding the scruple altogether, and also the signs ʒ and ℈ in prescribing, thus avoiding a confusion which has led to so many serious errors. Secondly, by expressing all quantities entering into prescriptions in grains and minims, provided that they shall be so grouped as properly to represent grains, minims, drachms, ounces, etc.

Let X, Y, Z, be the signs—

Thus $X^d_g j$=1 gr. $Y^d_g j$=60 grs. or ʒ. $Z^d_g j$=480 grs. or ℈, and $Z^d_g xij$=5760 grs. or ℔.

And $X\mathfrak{m}j$=1 ♏. $Y\mathfrak{m}j$=60 ♏ or fl. ʒ. $Z\mathfrak{m}j$ =480 ♏ or fl. ℈, and $Z\mathfrak{m}xvj$=7680 ♏ or O. Further explanation is unnecessary. *e. g.*

℞. Ferri et quiniæ citratis, $Y^d_g ij$
Acidi citrici, $X^d_g xx$
Aquæ calientis, $Z\mathfrak{m}ij$
solve. deinde adde
Aquæ, q.s. ad. $Z\mathfrak{m}iv$. Agitans.

SIG.—Dose, 60 minims, after meals, in anæmia.

℞. Antimonii et pot. tartratis, $X^d_g v$
Morphiæ muriatis, $X^d_g iv$
Extractum ipecac. fluidum
Ex. hyoscyam. fluidum, āā $Y\mathfrak{m}iiiss$
Aquæ, q. s. ad. $Z\mathfrak{m}v$.
Agitans.

SIG.—Dose, a teaspoonful every 3 or 6 hours, in obstinate cough.

GEO. HILL, M.D.

Hughesville, Pa., Feb. 9th, 1881.

Vomiting in Pregnancy.

ED. MED. AND SURG. REPORTER:—

Some time since I was called to see a Mrs. R. who was afflicted with vomiting in pregnancy to such an extent that she could eat nothing. I gave her about all of the usual and well-known remedies and methods of relief, with no benefit whatever.

Another M.D. was called in and tried all of his skill with no benefit, when I was again called. I found my patient emaciated and dropsical, with œdema of legs and feet, in fact, reduced to a pitiable condition. I had exhausted the resources

of the materia medica, to such an extent that I was at my wits' end, as to what to give or do, and in my dilemma prescribed comp. cathartic pills. U. S. P. formula. I did not hear again from my patient for several weeks, when her husband visited my office and wanted another box of the pills. His wife, he stated, had been perfectly relieved from the first dose of the pills, and an occasional dose kept her perfectly well and entirely free from the sickness.

I recommended the same remedy to another physician who detailed a case to me in which everything he had tried had failed, and miscarriage had threatened. He reported his case perfectly relieved of her sickness by the pills, and also of her threatened miscarriage. She had had three successive miscarriages previous to this time. I have no doubt but this simple remedy will relieve a large majority of these obstinate cases of vomiting; it will at least relieve those cases caused by reflex action, produced by pressure of fecal matters on the gravid uterus.

Grove City, Ill. J. G. HARVEY, A.M., M.D.

Dysmenorrhea.

ED. MED. AND SURG. REPORTER:—

I have for some time past treated cases of dysmenorrhœa as follows, with very satisfactory results.—

R. Iodidi potassii,		
Bromidi potassii,	āā	℥j
Syr. simp.,		℥iij.

A teaspoonful to be taken three times daily, commencing ten days previous to menstrual period.

When pain commences—

R. Tinct. opii camph.,	℥ij
Morph. sulph.,	gr. ij
Ol. piper.,	gtt. ij.

A teaspoonful every three or four hours while pain continues.

The above has proved very satisfactory to me and may be worth something to others, as I have seldom had to repeat the course more than once to effect a permanent cure. I. W. PEARSON, M.D.

York Springs, Pa.

NEWS AND MISCELLANY.

Interference Acts.

The following extraordinary acts have been introduced before the Pennsylvania Legislature, and we are informed by a responsible gentleman that they are strongly urged, and may possibly pass. Let not this folly be committed:—

AN ACT TO REQUIRE PHYSICIANS AND OTHERS TO WRITE THE NAMES OF MEDICINES IN THE ENGLISH LANGUAGE ON THEIR RECIPES.

WHEREAS, Grievous errors and mistakes have been made by druggists and others in the compounding of the prescriptions of physicians, by reason of the same being heretofore written in the Latin tongue and in abbreviations thereof, as well as the quantities or proportions of the drugs or medicines being designated therein by figures or symbols in a mode not readily understood by the bulk of the people, whereby undue advantage and a mystification of the patients may be taken by unscrupulous doctors, druggists and persons who prescribe or compound medicines for the sick and poor, and it being desirable to simplify the practice of medicine, and to enable the public generally to better comprehend the names and nature of such drugs; therefore—

SECTION 1. *Be it enacted by the Senate and House of Representatives of the Commonwealth of Pennsylvania in general assembly met, and it is hereby enacted by the authority of the same,* That physicians and all other persons engaged in prescribing medicines or drugs for the sick, shall write the names, quantities and designations of the same plainly, in the English language, and without abbreviations; and a copy of such recipe or medicines so compounded by druggists, herbists or any other persons shall be labeled or written on the outside of the bottles, vials or packages containing the same.

SEC. 2. That any persons violating the provisions of this Act shall be guilty of a misdemeanor, and on conviction before a magistrate, alderman or justice of the peace of the county where such offence may be committed, shall be subject to a fine of twenty dollars for each offence, together with costs; and in default of payment, to an imprisonment of not less than ten days, or more than twenty days, at the discretion of the court.

SEC. 3. This Act shall take effect immediately.

AN ACT TO REQUIRE DRUGGISTS AND OTHERS TO LABEL THE BOTTLES, ETC., OF MEDICINES IN THE ENGLISH LANGUAGE.

WHEREAS, Serious mistakes and confusion in the sale and compounding of medicines for the sick have occurred by druggists and others, by reason of the names thereof being written or printed in the Latin tongue; therefore

SECTION 1. *Be it enacted by the Senate and House of Representatives of the Commonwealth of Pennsylvania in general assembly met, and it is hereby enacted by the authority of the same,* That all druggists, vendors or compounders of drugs, medicines or herbs for the use of the sick are hereby required to label or print the names thereof conspicuously on the outside of the bottles, pots or packages containing the same, in the English language and without abbreviations.

SEC. 2. That any person violating the provisions of this Act shall be guilty of a misdemeanor, and on conviction before a magistrate, alderman or justice of the peace of the county where such offence may be committed, shall be subject to a fine of ten dollars for each offence, together with costs; and in default of payment, to an imprisonment of not less than ten days, or more than thirty days, at the discretion of the court.

SEC. 3. This Act shall take effect immediately.

We have not learned who the parent of this absurd legislation is.

National Association for the Protection of the Insane and the Prevention of Insanity.

We have been requested to state the scope and object of this Association, which was organized last summer, and held a meeting at Cleveland,

Ohio. Its purpose may be understood from the following quotation from the circular then issued.

"There are multitudes of insane men and women in the United States for whom no special provision is made in the way of care and treatment. Occasional legislative and other investigations have brought to light the misery and suffering that this absence of special care and treatment has produced. Furthermore, even when it has been supposed that this has been secured by the establishment of State, County, and City insane asylums, these have sometimes failed of their purpose, through mismanagement, or a misconception of the proper methods to be used. Thus there is room for organized effort to improve the condition of the insane. Again, inasmuch as each State has the exclusive control of the policy and the mode of management of the insane within its borders, it would seem as if such organization were desirable to unify the principle and the practices in the care and treatment in the United States generally. Two other organizations may, perhaps, be supposed to cover the same field with the new society.

"The Association of Superintendents of Insane Asylums was established with somewhat similar ends in view. But this is strictly a professional and technical organization. It includes only the Medical Superintendents of insane asylums, and it is safe to say that their interest in the insane bears no greater proportion to the public interest in the same class, than their membership bears to the vast number of the insane under treatment, together with their families and friends.

"The Conference of Charities, which has been working in the same direction, falls short of covering the whole field, in the fact that it is commensurate only with the States where Boards of State Charities exist, and also because its energies are scattered over the whole ground of the dependent and criminal classes. This National Association, then, by confining its labors to a single class, but the whole of that class in the United States, wherever situated, may reasonably hope to accomplish more in the line of its purpose than the others named, especially if co-operating with them in the general aims. It solicits, therefore, the general coöperation of all friends of the insane, and all interested in the subject, whether connected with the other organizations named, or among the public generally."

At this meeting the following officers of the Association were elected: H. B. Wilbur, M.D., Syracuse, N. Y., President; Nathan Allen, M.D., LL.D., Lowell, Mass., Vice President; Miss A. A. Chevaillier, Boston, Mass., Secretary; George M. Beard, M.D., New York, N. Y., Treasurer.

Is Cold Favorable to Health?

In his last report as registrar of Providence, Dr. Snow writes:—

"There is a popular error, which we often hear spoken of in the winter season, that clear, cold weather is favorable to the public health. The truth is, that *in this climate* severe cold weather, if continued more than two or three days, increases the number of deaths as certainly as continued hot weather, though in a different manner. Severe cold depresses the vital forces, and exposure to it produces fatal results among those persons, or classes of persons, whose vital force is weakened by any cause. Such persons are the aged and the very young, and also all who are sick or debilitated from any other cause. Besides this, severe cold is no preventive of, but on the contrary, is favorable to the spread of some of our most fatal diseases, as smallpox, diphtheria, and scarlatina. This is shown at the present time in Brooklyn, New York, Philadelphia, Chicago and other places."

"Dr. Buchanan."

Judge Allison declined, on February 12th, to sentence Dr. Buchanan, the "diploma vendor," for the crimes to which he pleaded guilty in the Quarter Sessions. He was then under indictment in the United States District Court, upon which he was sentenced to the Eastern Penitentiary, and, added his Honor, it is now impossible to sentence him to the County Prison, as he cannot at one and the same time be imprisoned under sentence in the Eastern Penitentiary and the County Prison.

Dr. Charles H. Kehnroth, who pleaded guilty, some time ago, to selling academic degrees, was sentenced, on the same day, to twelve months' imprisonment.

Items.

—On February 22, Dr. William Pepper was formally inaugurated as Provost of the University of Pennsylvania.

—We have a number of letters from physicians in different sections condemning the effort to force the metric system upon the profession.

—At an annual dinner of the Baltimore Med. and Surg. Soc., Jan. 26th, 1881, Dr. J. J. Caldwell recited an interesting poem on "The Triumphs of Science."

—A young Russian lady, who was studying medicine in Paris, committed suicide, in December, by firing off a revolver through her head. Death was instantaneous; and it was ascertained that the despair of passing her examination, which was to come off the next day, was the cause of the melancholy event.

—An ingenious philanthropist proposes to diminish the mortality among the wounded in war by tattooing on the soldiers' bodies the principal points where compression may be made in cases of hemorrhage. Life may be lost in a few minutes by a wound of a large artery, and it is thought the soldier might often escape if he knew where to command an artery while waiting for help.

—Dr. J. T. Reeve, Secretary of the Wisconsin State Board of Health, writes us that the alleged presence of smallpox in Wisconsin is an error. Only one case has been reported in Wisconsin, and effective measures have been taken with that. The Board has issued a circular impressing on the people the importance of vaccination.

OBITUARY NOTICES.

—Dr. Allison E. Perrine, a brother of Quartermaster General Perrine, died Feburary 7th, age 75 years, at his home, a few miles from Trenton, N. J.

—Dr. William Trevitt, a prominent citizen of Columbus, Ohio, ex-legislator and ex-Secretary of State, is dead, at the age of 82 years. He was surgeon on the staffs of Generals Taylor and Wool, of the Mexican War, consul at Valparaiso and afterward at Callao, under Buchanan.

—Dr. Edward A. Page, who had been a practicing physician and surgeon for thirty years, died February 18th, at his residence, No. 1415 Walnut street, from disease of the liver, in the fifty-first year of his age. Deceased rendered valuable service as an army surgeon during the war, and afterward resumed his practice in this city. He was medical director of the Penn Mutual Insurance Company, and was connected with St. Joseph's and other hospitals.

—Dr. Edward S. Bell, of Zanesville, Ohio, died in January, at an early age. The Zanesville Academy of Medicine passed resolutions of respect to his memory, in which they say:—

"The death of our accomplished young friend, Dr. E. S. Bell, can fairly be traced to his excessive devotion to books, to the bad air and his self-sacrificing attentions to the sick in hospitals, and to malarial and septic poisoning: in truth, his life was another sacrifice to science and humanity."

—In December, in Rio de Janeiro, a Professor of the School of Medicine, Dr. Louis Pientzenauer, committed suicide while the bailiffs were in his house executing a distress for rent. The fact caused an extraordinary sensation. His salary was about $2500 a year, but it appears that his private practice was very small, and the expenses of living in Rio are enormous. He was separated from his wife, but left an octogenarian mother and four children. Subscriptions have been opened for the benefit of the family, the Emperor and Empress having both contributed.

—Dr. James O. Pond died in New York city last week, at the age of 90 years. Dr. Pond was a native of Torringford, Conn, where he lived for nearly thirty years. He graduated from the medical department of Yale, and first practiced his profession in his native town. He represented Torringford for several terms in the Connecticut General Assembly, and at one time, while President of the Senate, became, temporarily, the acting Lieutenant-Governor of the State. He came to New York City in 1829 or 1830, and opened an office in the neighborhood of Carmine street. While in that part of the city he was called by a friend to participate in making an autopsy on the body of a 'longshoreman. The popular feeling against dissection was at that time so strong that, the matter becoming noised abroad, great crowds collected about the house where the autopsy was to have taken place, and a riot was imminent. Through the efforts of the militia and Bishop Dubois, violence was prevented, and Dr. Pond and his friend escaped injury, but their residences were specially guarded for several days, so determined were the 'longshoreman's friends on revenge for what they considered at least an insult to humanity. Dr. Pond subsequently became the treasurer of the New York Academy of Medicine, which position he held for many years.

QUERIES AND REPLIES.

Dr. A. N. Dougherty, Newark, N. J., on the results of aspiration and of free incisions in the treatment of chronic emphysema. He will be glad to receive statistics and cases from any member of the profession.

MR. EDITOR.—In No. 6, February 5th, 1881, is a reply to "Sicurus," in your medical and surgical journal, concerning a plant with the name of *hermodactyl*. The orthography of this word is, in German, *hermodatteln*, in English hermodates—and means the bulbous roots of Iris Germanica, belongs to the family Irideæ, used in old times as a diuretic, by Hydrops, etc.

Yours, respectfully,

Mahanoy City. PHILIP WEBER, M.D.

Dr. T. B. T., of O., would like suggestions for the treatment of an obstinate case of chorea in a girl eight years old. All ordinary plans have failed

Dr. E. N., of S. C., asks: Can a fœtus at two months' gestation receive the infection of measles and it lie dormant till after birth, and then the infant have a well-developed case of measles?

Dr. E. D., of Pa.—We cannot find that the instrument you inquire about is still manufactured. It seems to have been superseded.

Dr. P. P. A., of Miss., asks whether there are any means by which the female breast can be developed. Many ladies are greatly grieved at the atrophy of the gland after nursing, and if there are any hygienic measures by which the symmetry of the form could be restored, he should like to learn of it through the REPORTER.

Dr. M., of Tenn.—Dr. Leonard mentions various depilatories, but none free from serious objections.

Dr. H. A. A., of Ala.—The "liver regulator" you inquire about has not, we believe, been analyzed.

MARRIAGES.

ALBA—GUNDAKER.—At Newark, N. J., January 31st, 1881, by Rev. S. L. Baldwin, D.D., Rev. Francis Tait Alba, M.D., and Mrs. Emma Scheerer Gundaker, all of Newark.

BECKWITH—HUNTER.—In New York city, on Thursday, January 13th, 1881, by Rev. Thomas S. Hastings, D.D., Frank E. Beckwith, M.D., and Miss Rachel B. Hunter.

OWENS—FOSTER.—On January 13th, 1881, at the residence of the bride's parents, Ashland, Schuylkill Co., Pa., by the Rev. James Robinson, Pastor of the First Presbyterian Church, Dr. Wm. R. Owens and Miss Lillie Foster, all of Ashland, Pa.

DEATHS.

BARTLETT.—In New York, on Saturday, February 5th, Rodman Bartlett, M.D.

PERRINE.—In Lawrence Township, N. J., on the 6th inst., Allinson E. Perrine, M.D., aged 75 years.

POND.—In New York, on Tuesday, February 1st, Dr. James O. Pond, aged 90 years.

SMATHERS.—Of scarlet fever, on January 30th, Mary Myrtle, only daughter of Dr. W. J., and M. C. Smathers, of Du Bois, Pa., aged 4 years, 8 months and 16 days.